

PART 70 OPERATING PERMIT

OFFICE OF AIR MANAGEMENT

Thermafiber LLC, Wabash Plant
3711 West Mill Street Extended
Wabash, Indiana 46992

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: T 169-6218-00009	
Issued by: Janet G. McCabe, Assistant Commissioner Office of Air Management	Issuance Date: Expiration Date:

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SECTION A

SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)] [326 IAC 2-7-1(22)]

The Permittee owns and operates a stationary mineral wool manufacturing source.

Responsible Official:	David Holston
Source Address:	3711 West Mill Street Extended, Wabash, Indiana 46992
Mailing Address:	3711 West Mill Street Extended, Wabash, Indiana 46992
SIC Code:	3296
County Location:	Wabash
County Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Permit Program
	Major Source, under PSD Rules
	Major Source, Section 112 of the Clean Air Act

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source consists of the following emission units and pollution control devices:

- (a) One (1) coke-fueled cupola #2, known as EU-P2, installed in 1955, and refurbished in 1995, natural gas supplemented, equipped with a drop-out box, multiclone in series and a side stream baghouse, exhausting through Stack S1, installed in 1995, capacity: 7.0 tons of minerals per hour.
- (b) One (1) coke-fueled cupola #4, known as EU-P4, installed in 1955, and refurbished in 1994, natural gas supplemented, equipped with a drop-out box, multiclone in series and a side stream baghouse, exhausting through Stack S3, installed in 1995, capacity: 8.0 tons of minerals per hour.
- (c) One (1) blowchamber #4, known as EU-P6, installed in 1955, equipped with a dry media filter, exhausting through Stack S4, installed in 1992, capacity: 8.0 tons of fiberized minerals and 0.1 tons of dedusting annealing oil per hour.
- (d) One (1) natural gas-fired curing oven #2, known as EU-P7, rated at 5.7 million British thermal units per hour, exhausting through Stack S5, installed in 1955, and replaced 1978, capacity: 7.0 tons of fiberized minerals per hour.
- (e) One (1) blowchamber #2, known as EU-P8, equipped a dry media filter, exhausting through Stack S6, installed in 1955, replaced in 1978 and refurbished in 1999, capacity: 7.0 tons of fiberized minerals and 1.4 tons of binder and water per hour.
- (f) One (1) #2 line trimming/sizing section, known as EU-P9, equipped with a baghouse, known as CE7, exhausting through Stack S7, installed in 1955, and replaced in 1978, capacity: 5.8 tons of fiberized minerals per hour.

- (g) One (1) #2 line cooling section, known as EU-P10, exhausting through Stack S8, installed in 1955, and replaced in 1978, capacity: 7.0 tons of fiberized minerals per hour.
- (h) One (1) natural gas-fired #1 boiler, known as EU-P11, rated at 12.5 million British thermal units per hour, exhausting through Stack S9, installed in January 31, 1990.
- (i) Two (2) storage tanks, known as Tanks 4 and 5, capacity: 4,000 gallons of resin, each.
- (j) Two (2) storage tanks, known as Tanks 6 and 7, capacity: 5,000 gallons of reax, each.
- (k) One (1) storage tank, known as Tank 8, installed prior to 1960, capacity: 3,700 gallons of binder.
- (l) One (1) binder mix tank, known as Tank 9, installed prior to 1960, capacity: 500 gallons of process fluids.

A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)]
[326 IAC 2-7-5(15)]

This stationary source also includes the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):

- (a) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment. (326 IAC 6-3)
- (b) Conveyors as follows: covered conveyors for coal or coke conveying of less than or equal to 360 tons per day. (326 IAC 6-3)
- (c) Other activities or categories not previously identified (326 IAC 6-3): sand silo vent; cement silo vent; kiln cooling exhaust stack
- (d) One (1) natural gas-fired boiler, known as boiler #2, rated at 4.5 million British thermal units per hour, exhausting through Stack 10, installed in 1977. (326 IAC 6-2)

A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

- (a) It is a major source, as defined in 326 IAC 2-7-1(22);
- (b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

SECTION B

GENERAL CONDITIONS

B.1 Definitions [326 IAC 2-7-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2 and 326 IAC 2-7) shall prevail.

B.2 Permit Term [326 IAC 2-7-5(2)]

This permit is issued for a fixed term of five (5) years from the original date, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date.

B.3 Enforceability [326 IAC 2-7-7]

Unless otherwise stated, all terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM, the United States Environmental Protection Agency (U.S. EPA) and by citizens in accordance with the Clean Air Act.

B.4 Termination of Right to Operate [326 IAC 2-7-10] [326 IAC 2-7-4(a)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-7-3 and 326 IAC 2-7-4(a).

B.5 Severability [326 IAC 2-7-5(5)]

The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

B.6 Property Rights or Exclusive Privilege [326 IAC 2-7-5(6)(D)]

This permit does not convey any property rights of any sort or any exclusive privilege.

B.7 Duty to Supplement and Provide Information [326 IAC 2-7-4(b)] [326 IAC 2-7-5(6)(E)] [326 IAC 2-7-6(6)]

(a) The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) The Permittee shall furnish to IDEM, OAM, within a reasonable time, any information that IDEM, OAM, may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34). Upon request, the Permittee shall also furnish to IDEM, OAM, copies of records required to be kept by this permit or, for information claimed to be confidential, the Permittee may furnish such records directly to the U. S. EPA along with a claim of confidentiality. [326 IAC 2-7-5(6)(E)]

- (c) The Permittee may include a claim of confidentiality in accordance with 326 IAC 17. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

B.8 Compliance with Permit Conditions [326 IAC 2-7-5(6)(A)] [326 IAC 2-7-5(6)(B)]

- (a) The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit, except those specifically designated as not federally enforceable, constitutes a violation of the Clean Air Act and is grounds for:
 - (1) Enforcement action;
 - (2) Permit termination, revocation and reissuance, or modification; or
 - (3) Denial of a permit renewal application.
- (b) It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
- (c) An emergency does constitute an affirmative defense in an enforcement action provided the Permittee complies with the applicable requirements set forth in condition B, Emergency Provisions.

B.9 Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)(C)]

- (a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by a responsible official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification.
- (c) A responsible official is defined at 326 IAC 2-7-1(34).

B.10 Annual Compliance Certification [326 IAC 2-7-6(5)]

- (a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. The initial certification shall cover the time period from the date of final permit issuance through December 31 of the same year. All subsequent certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than July 1 of each year to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

- (b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM, on or before the date it is due.
- (c) The annual compliance certification report shall include the following:
 - (1) The appropriate identification of each term or condition of this permit that is the basis of the certification;
 - (2) The compliance status;
 - (3) Whether compliance was continuous or intermittent;
 - (4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-7-5(3); and
 - (5) Such other facts, as specified in Sections D of this permit, as IDEM, OAM, may require to determine the compliance status of the source.

The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

B.11 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)]
[326 IAC 1-6-3]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit, including the following information on each facility:
 - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If, due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

The PMP and the PMP extension notification do not require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

- (b) The Permittee shall implement the PMPs as necessary to ensure that failure to implement a PMP does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (c) A copy of the PMPs shall be submitted to IDEM, OAM, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAM. IDEM, OAM, may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or contributes to any violation. The PMP does not require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).
- (d) Records of preventive maintenance shall be retained for a period of at least five (5) years. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

B.12 Emergency Provisions [326 IAC 2-7-16]

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation, except as provided in 326 IAC 2-7-16.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:
 - (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
 - (2) The permitted facility was at the time being properly operated;
 - (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
 - (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAM, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Management, Compliance Section), or
Telephone Number: 317-233-5674 (ask for Compliance Section)
Facsimile Number: 317-233-5967
 - (5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-7-5(3)(C)(ii) and must contain the following:

- (A) A description of the emergency;
- (B) Any steps taken to mitigate the emissions; and
- (C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) IDEM, OAM, may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4-(c)(10) be revised in response to an emergency.
- (f) Failure to notify IDEM, OAM, by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.
- (g) Operations may continue during an emergency only if the following conditions are met:
 - (1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.
 - (2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:
 - (A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and
 - (B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value.

Any operation shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.

B.13 Permit Shield [326 IAC 2-7-15] [326 IAC 2-7-20] [326 IAC 2-7-12]

- (a) Pursuant to 326 IAC 2-7-15, the Permittee has been granted a permit shield. The permit shield provides that compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided that either the applicable requirements are included and specifically identified in this permit or the permit contains an explicit determination or concise summary of a determination that other specifically identified requirements are not applicable. The Indiana statutes from IC 13 and rules from 326 IAC, referenced in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a Part 70 permit under 326 IAC 2-7 or for applicable requirements for which a permit shield has been granted.

This permit shield does not extend to applicable requirements which are promulgated after the date of issuance of this permit unless this permit has been modified to reflect such new requirements.

- (b) This permit shall be used as the primary document for determining compliance with applicable requirements established by previously issued permits. All previously issued operating permits are superseded by this permit.
- (c) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, IDEM, OAM, shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued. The permit shield shall continue in effect so long as the Permittee is in compliance with the compliance order.
- (d) No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application. Erroneous information means information that the Permittee knew to be false, or in the exercise of reasonable care should have been known to be false, at the time the information was submitted.
- (e) Nothing in 326 IAC 2-7-15 or in this permit shall alter or affect the following:
- (1) The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the U.S. EPA under Section 303 of the Clean Air Act;
 - (2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of this permit's issuance;
 - (3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act; and
 - (4) The ability of U.S. EPA to obtain information from the Permittee under Section 114 of the Clean Air Act.
- (f) This permit shield is not applicable to any change made under 326 IAC 2-7-20(b)(2) (Sections 502(b)(10) of the Clean Air Act changes) and 326 IAC 2-7-20(c)(2) (trading based

on State Implementation Plan (SIP) provisions).

- (g) This permit shield is not applicable to modifications eligible for group processing until after IDEM, OAM, has issued the modifications. [326 IAC 2-7-12(c)(7)]
- (h) This permit shield is not applicable to minor Part 70 permit modifications until after IDEM, OAM, has issued the modification. [326 IAC 2-7-12(b)(7)]

B.14 Multiple Exceedances [326 IAC 2-7-5(1)(E)]

Any exceedance of a permit limitation or condition contained in this permit, which occurs contemporaneously with an exceedance of an associated surrogate or operating parameter established to detect or assure compliance with that limit or condition, both arising out of the same act or occurrence, shall constitute a single potential violation of this permit.

B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]

- (a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provisions), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. Deviations that are required to be reported by an applicable requirement shall be reported according to the schedule stated in the applicable requirement and do not need to be included in this report.

The notification by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit or a rule. It does not include:
 - (1) An excursion from compliance monitoring parameters as identified in Section D of this permit unless tied to an applicable rule or limit; or
 - (2) Failure to implement elements of the Preventive Maintenance Plan unless such failure has caused or contributed to a deviation.

A Permittee's failure to take the appropriate response step when an excursion of a compliance monitoring parameter has occurred is a deviation.

Emergencies shall be included in the Quarterly Deviation and Compliance Monitoring Report.

B.16 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-7-5(6)(C)] [326 IAC 2-7-8(a)] [326 IAC 2-7-9]

- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-7-5(6)(C)] The notification by

the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAM, determines any of the following:
 - (1) That this permit contains a material mistake.
 - (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.
 - (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-7-9(a)(3)]
- (c) Proceedings by IDEM, OAM, to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-7-9(b)]
- (d) The reopening and revision of this permit, under 326 IAC 2-7-9(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAM, at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAM, may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(c)]

B.17 Permit Renewal [326 IAC 2-7-4]

- (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAM, and shall include the information specified in 326 IAC 2-7-4. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

- (b) Timely Submittal of Permit Renewal [326 IAC 2-7-4(a)(1)(D)]
 - (1) A timely renewal application is one that is:
 - (A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
 - (B) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM, on or before the date it is due.
 - (2) If IDEM, OAM, upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this

existing permit shall not expire and all terms and conditions shall continue in effect, including any permit shield provided in 326 IAC 2-7-15, until the renewal permit has been issued or denied.

- (c) Right to Operate After Application for Renewal [326 IAC 2-7-3]
If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-7 until IDEM, OAM, takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAM, any additional information identified as being needed to process the application.
- (d) United States Environmental Protection Agency Authority [326 IAC 2-7-8(e)]
If IDEM, OAM, fails to act in a timely way on a Part 70 permit renewal, the U.S. EPA may invoke its authority under Section 505(e) of the Clean Air Act to terminate or revoke and reissue a Part 70 permit.

B.18 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]

- (a) Permit amendments and modifications are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

Any such application should be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

B.19 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)] [326 IAC 2-7-12 (b)(2)]

- (a) No Part 70 permit revision shall be required under any approved economic incentives, marketable Part 70 permits, emissions trading, and other similar programs or processes for changes that are provided for in a Part 70 permit.
- (b) Notwithstanding 326 IAC 2-7-12(b)(1)(D)(i) and 326 IAC 2-7-12(c)(1), minor Part 70 permit modification procedures may be used for Part 70 modifications involving the use of economic incentives, marketable Part 70 permits, emissions trading, and other similar approaches to the extent that such minor Part 70 permit modification procedures are explicitly provided for in the applicable State Implementation Plan (SIP) or in applicable requirements promulgated or approved by the U.S. EPA.

B.20 Operational Flexibility [326 IAC 2-7-20] [326 IAC 2-7-10.5]

- (a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-7-20(b), (c), or (e), without a prior permit revision, if each of the following conditions is met:

- (1) The changes are not modifications under any provision of Title I of the Clean Air Act;
- (2) Any preconstruction approval required by 326 IAC 2-7-10.5 has been obtained;
- (3) The changes do not result in emissions which exceed the emissions allowable under this permit (whether expressed herein as a rate of emissions or in terms of total emissions);
- (4) The Permittee notifies the:

Indiana Department of Environmental Management
Permits Branch, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance copy of this permit; and

- (5) The Permittee maintains records on-site which document, on a rolling five (5) year basis, all such changes and emissions trading that are subject to 326 IAC 2-7-20 (b), (c), or (e) and makes such records available, upon reasonable request, for public review.

Such records shall consist of all information required to be submitted to IDEM, OAM, in the notices specified in 326 IAC 2-7-20(b), (c)(1), and (e)(2).

- (b) The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-7-20(a). For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:

- (1) A brief description of the change within the source;
- (2) The date on which the change will occur;
- (3) Any change in emissions; and
- (4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) Emission Trades [326 IAC 2-7-20(c)]
The Permittee may trade increases and decreases in emissions in the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject

to the constraints of Section (a) of this condition and those in 326 IAC 2-7-20(c).

- (d) Alternative Operating Scenarios [326 IAC 2-7-20(d)]
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-7-5(9). No prior notification of IDEM, OAM, or U.S. EPA is required.

B.21 Source Modification Requirement [326 IAC 2-7-10.5]

A modification, construction, or reconstruction is governed by 326 IAC 2 and 326 IAC 2-7-10.5.

B.22 Inspection and Entry [326 IAC 2-7-6] [IC 13-14-2-2]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAM, U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a Part 70 source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) Have access to and copy any records that must be kept under the conditions of this permit;
- (c) Inspect any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) Sample or monitor substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

B.23 Transfer of Ownership or Operational Control [326 IAC 2-7-11]

- (a) The Permittee must comply with the requirements of 326 IAC 2-7-11 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.
- (b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

The application which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

B.24 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)]

- (a) The Permittee shall pay annual fees to IDEM, OAM, within thirty (30) calendar days of receipt of a billing. Pursuant 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAM, the applicable fee is due April 1 of each year.
- (b) Except as provided in 326 IAC 2-7-19(e), failure to pay may result in administrative enforcement action or revocation of this permit.
- (c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-0425 (ask for OAM, Technical Support and Modeling Section), to determine the appropriate permit fee.

SECTION C

SOURCE OPERATION CONDITIONS

Entire Source

Emission Limitations and Standards [326 IAC 2-7-5(1)]

C.1 Particulate Matter Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) pounds per hour [326 IAC 6-3-2(c)]

Pursuant to 326 IAC 6-3-2(c), the allowable particulate matter emissions rate from any process not already regulated by 326 IAC 6-1 or any New Source Performance Standard, and which has a maximum process weight rate less than 100 pounds per hour shall not exceed 0.551 pounds per hour.

C.2 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.3 Open Burning [326 IAC 4-1] [IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1. 326 IAC 4-1-3 (a)(2)(A) and (B) are not federally enforceable.

C.4 Incineration [326 IAC 4-2] [326 IAC 9-1-2]

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and 326 IAC 9-1-2. 326 IAC 9-1-2 is not federally enforceable.

C.5 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

C.6 Operation of Equipment [326 IAC 2-7-6(6)]

Except as otherwise provided by statute or rule, or in this permit, all air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation.

C.7 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted. The provisions of 326 IAC 1-7-2, 326 IAC 1-7-3(c) and (d), 326 IAC 1-7-4(d)(3), (e), and (f), and 326 IAC 1-7-5(d) are not federally enforceable.

C.8 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

- (a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.
- (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:
 - (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
 - (2) If there is a change in the following:
 - (A) Asbestos removal or demolition start date;
 - (B) Removal or demolition contractor; or
 - (C) Waste disposal site.
- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management
Asbestos Section, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

The notifications do not require a certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (e) **Procedures for Asbestos Emission Control**
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-4, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.
- (f) **Indiana Accredited Asbestos Inspector**
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement that the inspector be accredited is federally enforceable.

Testing Requirements [326 IAC 2-7-6(1)]

C.9 Performance Testing [326 IAC 3-6]

- (a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAM.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) The Permittee shall notify IDEM, OAM of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAM not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAM, if the source submits to IDEM, OAM, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

C.10 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]

C.11 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

Unless otherwise specified in this permit, all monitoring and record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within ninety (90) days, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification of the reasons for the inability to meet this date.

The notification which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Unless otherwise specified in the approval for the new emission unit(s), compliance monitoring for new emission units or emission units added through a source modification shall be implemented when operation begins.

C.12 Maintenance of Emission Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]

- (a) In the event that a breakdown of the emission monitoring equipment occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem. To the extent practicable, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less frequent than required in Section D of this permit until such time as the monitoring equipment is back in operation. In the case of continuous monitoring, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less often than once an hour until such time as the continuous monitor is back in operation.
- (b) The Permittee shall install, calibrate, quality assure, maintain, and operate all necessary monitors and related equipment. In addition, prompt corrective action shall be initiated whenever indicated.

C.13 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60 Appendix B, 40 CFR 63, or other approved methods as specified in this permit.

C.14 Pressure Gauge and Other Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

- (a) Whenever a condition in this permit requires the measurement of pressure drop across any part of the unit or its control device, the gauge employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent ($\pm 2\%$) of full scale reading.
- (b) The Permittee may request the IDEM, OAM approve the use of a pressure gauge or other instrument that does not meet the above specifications provided the Permittee can demonstrate an alternative pressure gauge or other instrument specification will adequately ensure compliance with permit conditions requiring the measurement of pressure drop or other parameters.

Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

C.15 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]

Pursuant to 326 IAC 1-5-2 (Emergency Reduction Plans; Submission):

- (a) The Permittee shall prepare written emergency reduction plans (ERPs) consistent with safe operating procedures.
- (b) These ERPs shall be submitted for approval to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

within ninety (90) days after the date of issuance of this permit.

The ERP does require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

- (c) If the ERP is disapproved by IDEM, OAM, the Permittee shall have an additional thirty (30) days to resolve the differences and submit an approvable ERP.
- (d) These ERPs shall state those actions that will be taken, when each episode level is declared, to reduce or eliminate emissions of the appropriate air pollutants.
- (e) Said ERPs shall also identify the sources of air pollutants, the approximate amount of reduction of the pollutants, and a brief description of the manner in which the reduction will be achieved.
- (f) Upon direct notification by IDEM, OAM, that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level. [326 IAC 1-5-3]

C.16 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68.215]

If a regulated substance, subject to 40 CFR 68, is present at a source in more than a threshold quantity, 40 CFR 68 is an applicable requirement and the Permittee shall submit:

- (a) A compliance schedule for meeting the requirements of 40 CFR 68; or
- (b) As a part of the annual compliance certification submitted under 326 IAC 2-7-6(5), a certification statement that the source is in compliance with all the requirements of 40 CFR 68, including the registration and submission of a Risk Management Plan (RMP).

All documents submitted pursuant to this condition shall include the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

C.17 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

- (a) The Permittee is required to implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. The compliance monitoring plan can be either an entirely new document, consist in whole of information contained in other documents, or consist of a combination of new information and information contained in other documents. If the compliance monitoring plan incorporates by reference information contained in other documents, the Permittee shall identify as part of the compliance monitoring plan the documents in which the information is found. The elements of the compliance monitoring plan are:
 - (1) This condition;
 - (2) The Compliance Determination Requirements in Section D of this permit;
 - (3) The Compliance Monitoring Requirements in Section D of this permit;
 - (4) The Record Keeping and Reporting Requirements in Section C (Monitoring Data Availability, General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this permit; and
 - (5) A Compliance Response Plan (CRP) for each compliance monitoring condition of

this permit. CRP's shall be submitted to IDEM, OAM upon request and shall be subject to review and approval by IDEM, OAM. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee and maintained on site, and is comprised of:

- (A) Reasonable response steps that may be implemented in the event that compliance related information indicates that a response step is needed pursuant to the requirements of Section D of this permit; and
 - (B) A time schedule for taking reasonable response steps including a schedule for devising additional response steps for situations that may not have been predicted.
- (b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition. Failure to take reasonable response steps may constitute a violation of the permit.
- (c) Upon investigation of a compliance monitoring excursion, the Permittee is excused from taking further response steps for any of the following reasons:
 - (1) A false reading occurs due to the malfunction of the monitoring equipment. This shall be an excuse from taking further response steps providing that prompt action was taken to correct the monitoring equipment.
 - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied.
 - (3) An automatic measurement was taken when the process was not operating.
 - (4) The process has already returned or is returning to operating within "normal" parameters and no response steps are required.
- (d) Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.
- (e) All monitoring required in Section D shall be performed at all times the equipment is operating. If monitoring is required by Section D and the equipment is not operating, then the Permittee may record the fact that the equipment is not operating or perform the required monitoring.
- (f) At its discretion, IDEM may excuse the Permittee's failure to perform the monitoring and record keeping as required by Section D, if the Permittee provides adequate justification and documents that such failures do not exceed five percent (5%) of the operating time in any quarter. Temporary, unscheduled unavailability of qualified staff shall be considered a valid reason for failure to perform the monitoring or record keeping requirements in Section D.

C.18 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5][326 IAC 2-7-6]

- (a) When the results of a stack test performed in conformance with Section C - Performance

Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAM, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.

- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAM that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAM may extend the retesting deadline.
- (c) IDEM, OAM reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The documents submitted pursuant to this condition do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

C.19 Emission Statement [326 IAC 2-7-5(3)(C)(iii)] [326 IAC 2-7-5(7)] [326 IAC 2-7-19(c)] [326 IAC 2-6]

- (a) The Permittee shall submit an annual emission statement certified pursuant to the requirements of 326 IAC 2-6, that must be received by July 1 of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. The annual emission statement shall meet the following requirements:
 - (1) Indicate estimated actual emissions of criteria pollutants from the source, in compliance with 326 IAC 2-6 (Emission Reporting);
 - (2) Indicate estimated actual emissions of other regulated pollutants (as defined by 326 IAC 2-7-1) from the source, for purposes of Part 70 fee assessment.
- (b) The annual emission statement covers the twelve (12) consecutive month time period starting January 1 and ending December 31. The annual emission statement must be submitted to:

Indiana Department of Environmental Management
Technical Support and Modeling Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

The emission statement does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) The annual emission statement required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM, on or before the date it is due.

C.20 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6]

- (a) Records of all required data, reports and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are

available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

- (b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.21 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11]

- (a) The source shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015
- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM, on or before the date it is due.
- (d) Unless otherwise specified in this permit, any quarterly or semi-annual report required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. The reports do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (e) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years.

Stratospheric Ozone Protection

C.22 Compliance with 40 CFR 82 and 326 IAC 22-1

Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with the standards for recycling and emissions reduction:

- (a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.

- (b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.
- (c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

SECTION D.1

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

- (a) One (1) coke-fueled cupola #2, known as EU-P2, installed in 1955, and refurbished in 1995, natural gas supplemented, equipped with a drop-out box, multiclone in series and a side stream baghouse, exhausting through Stack S1, installed in 1995, capacity: 7.0 tons of minerals per hour.
- (b) One (1) coke-fueled cupola #4, known as EU-P4, installed in 1955, and refurbished in 1994, natural gas supplemented, equipped with a drop-out box, multiclone in series and a side stream baghouse, exhausting through Stack S3, installed in 1995, capacity: 8.0 tons of minerals per hour.
- (c) One (1) blowchamber #4, known as EU-P6, installed in 1955, equipped with a dry media filter, exhausting through Stack S4, installed in 1992, capacity: 8.0 tons of fiberized minerals and 0.1 tons of dedusting annealing oil per hour.
- (d) One (1) natural gas-fired curing oven #2, known as EU-P7, rated at 5.7 million British thermal units per hour, exhausting through Stack S5, installed in 1955, and replaced 1978, capacity: 7.0 tons of fiberized minerals per hour.
- (e) One (1) blowchamber #2, known as EU-P8, equipped a dry media filter, exhausting through Stack S6, installed in 1955, replaced in 1978 and refurbished in 1999, capacity: 7.0 tons of fiberized minerals and 1.4 tons of binder and water per hour.
- (f) One (1) #2 line trimming/sizing section, known as EU-P9, equipped with a baghouse, known as CE7, exhausting through Stack S7, installed in 1955, and replaced in 1978, capacity: 5.8 tons of fiberized minerals per hour.
- (g) One (1) #2 line cooling section, known as EU-P10, exhausting through Stack S8, installed in 1955, and replaced in 1978, capacity: 7.0 tons of fiberized minerals per hour.
- (h) One (1) natural gas-fired #1 boiler, known as EU-P11, rated at 12.5 million British thermal units per hour, exhausting through Stack S9, installed in January 31, 1990.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 General Provisions Relating to HAPs [326 IAC 20-1-1] [40 CFR Part 63, Subpart A]

The provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated as 326 IAC 20-1-1, apply to the two (2) cupolas (EU-P2 and EU-P4) and the curing oven (EU-P7) described in this section except when otherwise specified in 40 CFR Part 63, Subpart DDD.

D.1.2 Mineral Wool Production NESHAP [40 CFR 63, Subpart DDD]

Pursuant to 40 CFR 63.1180, the existing mineral wool cupolas, known as EU-P2 and EU-P4, and curing oven, known as EU-P7 operations are subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) (40 CFR 63, Subpart DDD), with a compliance date of June 2, 2002.

D.1.3 Particulate Matter (PM) Emission Limitation for Cupolas [40CFR Part 63.1178]

Pursuant to 40CFR Part 63.1178, at all times, except during periods of startup, shutdown, or malfunction, the particulate matter (PM) emissions from cupola #2 and cupola #4, known as EU-P2 and EU-P4, shall not exceed 0.10 pound of PM per ton of melt.

D.1.4 Formaldehyde Emission Limitation for Curing Ovens [40CFR Part 63.1179]

Pursuant to 40CFR Part 63.1179, at all times, except during periods of startup, shutdown, or malfunction, the formaldehyde emissions from curing oven #2, known as EU-P7, shall meet either of the following:

- (a) 0.06 pound of formaldehyde per ton of melt, or
- (b) Shall be reduced by at least eighty (80%) percent from the uncontrolled formaldehyde emissions.

D.1.5 Particulate Matter Limitation [326 IAC 6-2-4]

Pursuant to 326 IAC 6-2-4, particulate emissions from 12.5 million British thermal units per hour boiler (EU-P11) shall in no case exceed 0.522 pounds of particulate matter per million British thermal units heat input. The particulate matter emission limitation is calculated with the following equation pursuant to 326 IAC 6-2-4. The particulate matter (PM) emissions shall be limited to:

$$Pt = 1.09/Q^{0.26}$$

where, Q = the total source maximum operating capacity (17.0) in million British thermal units per hour.

D.1.6 Particulate Matter (PM) [326 IAC 6-3-2(c)]

Pursuant to 326 IAC 6-3-2(c), the PM from the two (2) cupolas (EU-P2 and EU-P4), the two (2) blowchambers (EU-P6 and EU-P8), curing oven #2 (EU-P7), line trimmings/sizing section (EU-P9) and #2 Line cooling section (EU-P10) shall not exceed the pound per hour emission rate established as E in the following formula:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

- (a) The particulate matter (PM) emissions from the cupola #2 (EU-P2) shall not exceed 15.1 pounds per hour for a process weight rate (P) of 7.0 tons per hour.
- (b) The particulate matter (PM) emissions from the cupola #4 (EU-P4) shall not exceed 16.5 pounds per hour for a process weight rate (P) of 8.0 tons per hour.
- (c) The particulate matter (PM) emissions from the blowchamber #4 (EU-P6) shall not exceed 16.7 pounds per hour for a process weight rate (P) of 8.1 tons per hour.
- (d) The particulate matter (PM) emissions from the blowchamber #2 (EU-P8) shall not exceed 17.1 pounds per hour for a process weight rate (P) of 8.4 tons per hour.
- (e) The particulate matter (PM) emissions from the curing oven #2 (EU-P7) shall not exceed 15.1 pounds per hour for a process weight rate (P) of 7.0 tons per hour.
- (f) The particulate matter (PM) emissions from the line trimming/sizing section #2 (EU-P9) shall not exceed 13.3 pounds per hour for a process weight rate (P) of 5.8 tons per hour.
- (g) The particulate matter (PM) emissions from the #2 line cooling section (EU-P10) shall not exceed 15.1 pounds per hour for a process weight rate (P) of 7.0 tons per hour.

D.1.7 PSD Minor Limit [326 IAC 2-2] [40 CFR 52.21]

In order to render the requirements of 326 IAC 2-2 (PSD) and 40 CFR 52.21 not applicable to the source:

- (a) The sulfur dioxide emissions from curing oven, known as EU-P7, shall not exceed 8.40 pounds per hour, equivalent to 36.8 tons per year
- (b) The SO₂ emission rate in (a) is based upon a maximum throughput of 7.0 tons per hour coupled with an emission factor of 1.2 pounds of SO₂ per ton of mineral charge.

D.1.8 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the two (2) cupolas (EU-P2 and EU-P4), the one (1) curing oven #2 (EU-P7), the two (2) blowchambers (EU-P6 and EU-P8), the #2 line cooling section (EU-P10) and the boiler (EU-P11) and their control devices.

Compliance Determination Requirements [326 IAC 2-1.1-11] [326 IAC 2-7-6(1)]

D.1.9 Free-Formaldehyde Content for Curing Ovens [40CFR Part 63.1183]

Pursuant 40 CFR 63.1183, the Permittee shall maintain the free-formaldehyde content of each resin lot and the formaldehyde content of each binder formulation at or below the specification ranges established during the performance test.

D.1.10 Incinerator Operating Temperature Maintenance [40CFR Part 63.1183]

Pursuant to 40 CFR 63.1183, the Permittee shall maintain the operating temperature of the incinerator at all times, except during periods of startup, shutdown, or malfunction, so that the average operating temperature for each three (3)-hour block period never falls below the average temperature established during the performance test.

D.1.11 Compliance Demonstration [40CFR Part 63.1190]

- (a) The Permittee shall use the following equation to demonstrate compliance with the PM emission limit specified in Condition D.1.3 for the cupolas:

$$E = \frac{C \times O \times K_1}{P}$$

where: E = Emission rate of PM, kg/Mg (lb/ton) of melt.
C = Concentration of PM, g/dscm (gr/dscf).
Q = Volumetric flow rate of exhaust gases, dscm/hr (dscf/hr).
K₁ = Conversion factor, 1 kg/1,000 g (1 lb/7,000 gr).
P = Average melt rate, Mg/hr (ton/hr).

- (b) The Permittee shall use the following equation to demonstrate compliance with the formaldehyde emission limit specified in Condition D.1.4 for the curing oven:

$$E = \frac{C \times MW \times O \times K_1 \times K_2}{K_3 \times P \times 10^6}$$

where: E = Emission rate of measured pollutant, kg/Mg (lb/ton) of melt.
C = Measured volume fraction of pollutant, ppm.
MW = Molecular weight of measured pollutant, g/g-mole.
CO = 28.01, Formaldehyde = 30.03.
Q = Volumetric flow rate of exhaust gases, dscm/hr (dscf/hr).
K₁ = Conversion factor, 1 kg/1,000 g (1 lb/453.6 g).
K₂ = Conversion factor, 1,000 L/m³ (28.3 L/ft³).
K₃ = Conversion factor, 24.45 L/g-mole.
P = Average melt rate, Mg/hr (ton/hr).

- (c) The Permittee shall use the following equation to demonstrate compliance with the formaldehyde percent reduction performance standard specified in Condition D.1.4 for the curing oven:

$$\%R = \frac{L_i - L_o}{L_i} \times 100$$

where: %R = Percent reduction, or collection efficiency of the control device.
L_i = Inlet loading of pollutant, kg/Mg (lb/ton).
L_o = Outlet loading of pollutant, kg/Mg (lb/ton).

D.1.12 Testing Requirements [326 IAC 2-7-6(1)] [326 IAC 2-1.1-11] [40 CFR Part 63.1185(a) and 40 CFR Part 63.1188]

The Permittee shall complete the following performance testing to demonstrate compliance with the requirements of 326 IAC 6-3-2 and Subpart DDD no later than the June 2, 2002; or by June 3, 2003 if the Permittee applies for and receives a one- (1-)year extension under section 112(i)(3)(B) of the Clean Air Act:

- (a) The Permittee shall perform testing in order to demonstrate compliance with Condition D.1.6 of the two (2) cupolas (EU-P2 and EU-P4) for PM utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.
- (b) The Permittee shall conduct a performance test in order to demonstrate compliance with Condition D.1.3 of each cupola for PM as specified in 40 CFR 63.1188 utilizing methods as approved by the Commissioner and show compliance with the PM emission limits while the bag leak detection system is installed, operational, and properly adjusted.
- (c) The Permittee shall conduct a performance test in order to demonstrate compliance with Condition D.1.4 of the curing oven for formaldehyde as specified in 40 CFR Part 63.1188 utilizing methods as approved by the Commissioner while manufacturing the product that requires a binder formulation made with the resin containing the highest free-formaldehyde content specification range. The Permittee shall show compliance with the formaldehyde emission limits while the device for measuring incinerator operating temperature is installed, operational, and properly calibrated. The Permittee shall establish the average operating temperature as specified in 40CFR Part 63.1185(a).

During the performance test for the curing oven that uses the binder formulation made with the resin containing the highest free-formaldehyde content specification range, record the free-formaldehyde content specification range of the resin used, and the formulation of the binder used, including the formaldehyde content and binder specification.

D.1.13 Particulate Matter (PM)

- (a) In order to comply with Conditions D.1.3 and D.1.6, the baghouses as well as the baghouses and the multiclone in series for PM control shall be in operation and control emissions from the cupolas and the trimming section, respectively, at all times that the cupolas and/or trimming section are in operation.
- (b) In order to comply with Conditions D.1.6, the media filters for PM control shall be in operation at all times when the blowchambers #2 and/or #4 are in operation.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)] [40 CFR Part 63]

D.1.14 Visible Emissions Notations

- (a) Visible emission notations of the two (2) cupolas (EU-P2 and EU-P4), the two (2) blowchambers (EU-P6 and EU-P8), curing oven #2 (EU-P7), line trimmings/sizing section (EU-P9 and the #2 line cooling section (EU-P10) stack exhausts shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

D.1.15 Parametric Monitoring

- (a) The Permittee shall record the total static pressure drop across the multiclones and side stream baghouses used in conjunction with the two (2) cupolas, at least once per shift when either or both of the cupolas are in operation when venting to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the multiclones and baghouses shall be maintained within the range of 3.0 and 7.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.
- (b) The Permittee shall record the total static pressure drop across the baghouse used in conjunction with the trimming/sizing section, at least once per shift when the trimming/sizing processes are in operation when venting to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the baghouse shall be maintained within the range of 4.0 and 8.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this

unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAM, and shall be calibrated at least once every six (6) months.

D.1.16 Baghouse Inspections

An inspection shall be performed each calendar quarter of all bags controlling the cupolas and the trimming/sizing section when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. All defective bags shall be replaced.

D.1.17 Broken or Failed Bag Detection

In the event that bag failure has been observed:

- (a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B- Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.
- (b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

D.1.18 Dry Media Filter Monitoring

- (a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters for each blowchamber (EU-P6 and EU-P8). To monitor the performance of the dry filters, weekly observations shall be made of the particulate matter from the blowchamber stacks S4 and S6 while one or more of the blowchambers are in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.
- (b) Monthly inspections shall be performed of the blowchamber emissions from the stacks and the particulate matter on the rooftops and the nearby ground. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when a noticeable change in particulate matter emission, or evidence of particulate matter emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

- (c) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

D.1.19 Cupola Bag Leak Detection System [40CFR Part 63.1178, 1181, 1184 and 1185] [40CFR Part 64.8(b) through (d)]

- (a) To be in compliance with the PM emission limit, pursuant to 40CFR Part 63.1181, the Permittee shall:
- (1) Install, adjust, maintain, and continuously operate a bag leak detection system for each fabric filter pursuant to 40CFR Part 63.1184.
 - (2) Begin corrective actions specified in the operations, maintenance, and monitoring plan required by 40CFR Part 63.1187 within one (1) hour after the alarm on a bag leak detection system sounds. Complete the corrective actions in a timely manner.
 - (3) Develop and implement a written QIP consistent with compliance assurance monitoring requirements of 40CFR Part 64.8(b) through (d) when the alarm on a bag leak detection system sounds for more than five (5%) percent of the total operating time in a six (6)-month reporting period.
- (b) Pursuant to 40CFR Part 63.1178, the operating limits for each cupola are as follows:
- (1) Begin within one hour after the alarm on a bag leak detection system sounds, and complete in a timely manner, corrective actions as specified in by the operations, maintenance, and monitoring plan required by 40CFR 63.1178, and
 - (2) When the alarm on a bag leak detection system sounds for more than five (5%) percent of the total operating time in a six (6)-month reporting period, the Permittee shall develop and implement a written quality improvement plan (QIP) consistent with the compliance assurance monitoring requirements of 40CFR 64.8(b)–(d).

D.1.20 Incinerator Operating Temperature [40CFR Part 63.1185]

Pursuant to 40CFR Part 63.1185(b), to comply with the requirements for maintaining the operating temperature of an incinerator after the performance test, the Permittee shall measure and record the average operating temperature of the incinerator as required by 40 CFR Parts 63.1182 and 63.1183 of this subpart. This average operating temperature of the incinerator is based on the arithmetic average of the one-hour average temperatures for each consecutive three-hour period and is determined in the same manner described in paragraphs (a)(1) through (a)(4) of 40CFR Part 1185.

D.1.21 Free-Formaldehyde Content for the Curing Oven [40CFR Part 63.1179] [40CFR Part 63.1183]

- (a) Pursuant to 40CFR Part 63.1183, the Permittee shall:
- (1) Install, calibrate, maintain, and operate a device that continuously measures the operating temperature in the firebox of each thermal incinerator.
 - (2) Following the performance test for the curing oven, the Permittee shall monitor and record the free-formaldehyde content of each resin lot and the formulation of each batch of binder used, including the formaldehyde content.
 - (3) Maintain the free-formaldehyde content of each resin lot and the formaldehyde content of each binder formulation at or below the specification ranges established during the performance test.

- (b) Pursuant to 40CFR Part 63.1179, the Permittee shall meet the following operating limits:

Maintain the free-formaldehyde content of each resin lot and the formaldehyde content of each binder formulation at or below the specification ranges of the resin and binder used during the performance test.

D.1.22 Incinerator Operating Temperature for the Curing Oven [40CFR Part 63.1183]

- (a) Pursuant to 40CFR Part 63.1179, the Permittee shall meet the following operating limits:

Maintain the operating temperature of the incinerator so that the average operating temperature for each three-hour block period never falls below the average temperature established during the performance test.

- (b) Pursuant to 40CFR Part 63.1183, the Permittee shall:

- (1) Following the performance test of the curing oven, measure and record the average operating temperature of the incinerator as specified in 40CFR Part 63.1185(b).
- (2) Operate and maintain the incinerator as specified in the operations, maintenance, and monitoring plan required by 40CFR Part 63.1187.

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.23 Record Keeping Requirements

- (a) To document compliance with Condition D.1.7, the Permittee shall maintain records in accordance with (1) and (3) below. Records maintained for (1) and (3) shall be taken monthly and shall be complete and sufficient to establish compliance with the usage limits and/or the SO₂ emission limit established in Condition D.1.7.

- (1) The total mineral charge per month,
- (2) Maximum mineral charge per hour on a monthly basis, and
- (3) The weight of SO₂ emitted for each compliance period.

- (b) To document compliance with Condition D.1.14, the Permittee shall maintain records of visible emission notations of the two (2) cupolas (EU-P2 and EU-P4), the two (2) blow-chambers (EU-P6 and EU-P8), curing oven #2 (EU-P7), line trimmings/sizing section (EU-P9 and the #2 Line cooling section (EU-P10) stack exhausts once per shift.

- (c) To document compliance with Condition D.1.15, the Permittee shall maintain the following:

- (1) Records once per shift of the following operational parameters during normal operation when venting to the atmosphere:
 - (A) Inlet and outlet differential static pressure; and
 - (B) Cleaning cycle operation.
- (2) Documentation of the dates vents are redirected.

- (d) To document compliance with Condition D.1.16, the Permittee shall maintain records of the results of the inspections required under Condition D.1.16 and the dates the vents are redirected.
- (e) To document compliance with Condition D.1.18, the Permittee shall maintain a log of weekly particulate matter observations, daily and monthly inspections, and those additional inspections prescribed by the Preventive Maintenance Plan.
- (f) The Permittee shall maintain monthly records of the amount and type of fuel burned in #1 boiler EU-P11 pursuant to 40 CFR 60 Subpart Dc
- (g) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.24 Record Keeping Requirements [40CFR Part 63.10(b)]

Pursuant to 40CFR Part 63.10(b), the Permittee shall:

Maintain files of all information for the two (2) cupolas (EU-P2 and EU-P4) and the curing oven (EU-P7) required by 40CFR Part 63.10(b) of the general provisions in Subpart A of this part, including all notifications and reports.

D.1.25 Record Keeping Requirements [40CFR Part 63.1192]

(a) Maintain records of the following information:

- (1) Cupola production (melt) rate (tons per hour) of melt.
- (2) All bag leak detection system alarms. Include the date and time of the alarm, when corrective actions were initiated, the cause of the alarm, an explanation of the corrective actions taken, and when the cause of the alarm was corrected.
- (3) The free-formaldehyde content of each resin lot and the binder formulation, including formaldehyde content, of each binder batch used in the manufacture of bonded products.
- (4) Incinerator operating temperature and results of incinerator inspections. For all periods when the average temperature in any three-hour block period fell below the average temperature established during the performance test, and all periods when the inspection identified incinerator components in need of repair or maintenance, include the date and time of the problem, when corrective actions were initiated, the cause of the problem, an explanation of the corrective actions taken, and when the cause of the problem was corrected.

(b) Retain each record for at least five (5) years following the date of each occurrence, measurement, corrective action, maintenance, record, or report. The most recent two (2) years of records must be retained at the facility. The remaining three (3) years of records may be retained off site.

The Indiana state rule cited in Section C - General Record Keeping is more stringent and therefore the Permittee shall maintain the most recent three(3) years of records at the source.

(c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.26 Reporting Requirements [40CFR 63.10(d) and 40CFR 63.1193]

- (a) A semi-annual summary of the information to document compliance with the natural gas fired boiler certification, shall be submitted to the address listed in Section C - General Reporting Requirements, using the reporting form located at the end of this permit, or their equivalent, within thirty (30) days after the end of the six (6) month period being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (b) Pursuant to 40 CFR Part 63.1193, the Permittee shall prepare and submit reports to the IDEM, OAM as required by this subpart and 40CFR Part 63.10 of the general provisions in Subpart A of this part. The reports submitted by the Permittee do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34). These reports include, but are not limited to, the following:
 - (1) A performance test report, as required by 40CFR Part 63.10(d)(2) of the general provisions in Subpart A of this part, that documents the process and control equipment operating parameters during the test period, the test methods and procedures, the analytical procedures, all calculations, and the results of the performance tests.
 - (2) A startup, shutdown, and malfunction plan, as described in 40CFR Part 63.6(e)(3) of the general provisions in Subpart A of this part, that contains specific procedures for operating and maintaining the source during periods of startup, shutdown, and malfunction and a program of corrective action for malfunctioning process and control systems used to comply with the emission standards. In addition to the information required by 40CFR Part 63.6(e)(3), the plan must include the following:
 - (i) Procedures to determine and record what caused the malfunction and when it began and ended.
 - (ii) Corrective actions you will take if a process or control device malfunctions, including procedures for recording the actions taken to correct the malfunction or minimize emissions.
 - (iii) An inspection and maintenance schedule for each process and control device that is consistent with the manufacturer's instructions and recommendations for routine and long-term maintenance.
 - (3) A report of each event as required by 40CFR Part 63.10(b) of the general provisions in subpart A of this part, including a report if an action taken during a startup, shutdown, or malfunction is inconsistent with the procedures in the plan as described in 40CFR Part 63.6(e)(3) of the general provisions in Subpart A of this part.
 - (4) An operations, maintenance, and monitoring plan as specified in 40CFR Part 63.1187 of this subpart.
 - (5) A semiannual report as required by 40CFR Part 63.10(e)(3) of the general provisions in Subpart A of this part if measured emissions exceed the applicable standard or a monitored parameter varies from the level established during performance testing. The report must contain the information specified in 40CFR Part 63.10(c) of the general provisions, as well as the relevant records required by 40CFR Part 63.1192(b) of this Subpart.

- (6) A semiannual report stating that no excess emissions or deviations of monitored parameters occurred during the reporting period as required by 40CFR Part 63.10 (e)(3)(v) of the general provisions in Subpart A of this part if no deviations have occurred.
- (7) Report the required information on paper or on a labeled computer disk using commonly available and compatible computer software.

D.1.27 Notification Requirements [40CFR Part 63.1191]

Pursuant to 40CFR Part 63.1191, the Permittee shall submit written notifications to the address listed in Section C - General Reporting Requirements as required by 40CFR 63.9(b - h) of the General Provisions in Subpart A of 40 CFR Part 63.

SECTION D.2

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

- (i) Two (2) storage tanks, known as Tanks 4 and 5, capacity: 4,000 gallons of resin, each.
- (j) Two (2) storage tanks, known as Tanks 6 and 7, capacity: 5,000 gallons of reax, each.
- (k) One (1) storage tank, known as Tank 8, installed prior to 1960, capacity: 3,700 gallons of binder.
- (l) One (1) binder mix tank, known as Tank 9, installed prior to 1960, capacity: 500 gallons of process fluids.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

There are no emission standards and compliance monitoring specifically applicable to these facilities.

SECTION D.3

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)] - Insignificant Activities

- (a) One (1) natural gas-fired boiler, known as boiler #2, rated at 4.5 million British thermal units per hour, exhausting through Stack 10, installed in 1977. (326 IAC 6-2)
- (b) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment. (326 IAC 6-3)
- (c) Conveyors as follows:
 - Covered conveyors for coal or coke conveying of less than or equal to 360 tons per day. (326 IAC 6-3)
- (d) Other activities or categories not previously identified (326 IAC 6-3): sand silo vent; cement silo vent; kiln cooling exhaust stack

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.3.1 Particulate Matter (PM) [326 IAC 6-3]

Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the brazing equipment, cutting torches, soldering equipment, and/or welding equipment as well as from the covered conveyors for coal or coke conveying, the sand and cement silo vents and the kiln cooling exhaust stack shall not exceed allowable PM emission rate based on the following equation:

Interpolation and extrapolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

D.3.2 Particulate Matter Limitation [326 IAC 6-2-3]

Pursuant to 326 IAC 6-2-3 (e), particulate emissions from the 4.5 million British thermal units per hour natural gas boiler#2 used for indirect heating purposes which began operations after June 8, 1972, shall in no case exceed 0.6 pounds of particulate matter per million British thermal units heat input.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
COMPLIANCE DATA SECTION**

**PART 70 OPERATING PERMIT
CERTIFICATION**

Source Name: Thermafiber LLC, Wabash Plant
Source Address: 3711 West Mill Street Extended, Wabash, Indiana 46992
Mailing Address: 3711 West Mill Street Extended, Wabash, Indiana 46992
Part 70 Permit No.: T 169-6218-00009

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.

Please check what document is being certified:

- 9 Annual Compliance Certification Letter
- 9 Test Result (specify) _____
- 9 Report (specify) _____
- 9 Notification (specify) _____
- 9 Affidavit (specify) _____
- 9 Other (specify) _____

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Date:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
COMPLIANCE BRANCH
P.O. Box 6015
100 North Senate Avenue
Indianapolis, Indiana 46206-6015
Phone: 317-233-5674
Fax: 317-233-5967**

**PART 70 OPERATING PERMIT
EMERGENCY OCCURRENCE REPORT**

Source Name: Thermafiber LLC, Wabash Plant
Source Address: 3711 West Mill Street Extended, Wabash, Indiana 46992
Mailing Address: 3711 West Mill Street Extended, Wabash, Indiana 46992
Part 70 Permit No.: T 169-6218-00009

This form consists of 2 pages

Page 1 of 2

- | |
|--|
| <p>9 This is an emergency as defined in 326 IAC 2-7-1(12)</p> <ul style="list-style-type: none"><input checked="" type="checkbox"/> The Permittee must notify the Office of Air Management (OAM), within four (4) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and<input checked="" type="checkbox"/> The Permittee must submit notice in writing or by facsimile within two (2) days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16. |
|--|

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:
Control Equipment:
Permit Condition or Operation Limitation in Permit:
Description of the Emergency:
Describe the cause of the Emergency:

If any of the following are not applicable, mark N/A

Page 2 of 2

Date/Time Emergency started:
Date/Time Emergency was corrected:
Was the facility being properly operated at the time of the emergency? Y N Describe:
Type of Pollutants Emitted: TSP, PM-10, SO ₂ , VOC, NO _x , CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by: _____

Title / Position: _____

Date: _____

Phone: _____

A certification is not required for this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
COMPLIANCE DATA SECTION**

**PART 70 OPERATING PERMIT
NATURAL GAS-FIRED BOILER CERTIFICATION**

Source Name: Thermafiber LLC, Wabash Plant
Source Address: 3711 West Mill Street Extended, Wabash, Indiana 46992
Mailing Address: 3711 West Mill Street Extended, Wabash, Indiana 46992
Part 70 Permit No.: T 169-6218-00009

**This certification shall be included when submitting monitoring, testing reports/results
or other documents as required by this permit.**

Report period

Beginning: _____

Ending: _____

Boiler Affected

Alternate Fuel

Days burning alternate fuel

From

To

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature: _____

Printed Name: _____

Title/Position: _____

Date: _____

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
COMPLIANCE DATA SECTION**

**PART 70 OPERATING PERMIT
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT**

Source Name: Thermafiber LLC, Wabash Plant
Source Address: 3711 West Mill Street Extended, Wabash, Indiana 46992
Mailing Address: 3711 West Mill Street Extended, Wabash, Indiana 46992
Part 70 Permit No.: T 169-6218-00009

Months: _____ **to** _____ **Year:** _____

Page 1 of 2

This report is an affirmation that the source has met all the requirements stated in this permit. This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. Deviations that are required to be reported by an applicable requirement shall be reported according to the schedule stated in the applicable requirement and do not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".

9 NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.

9 THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD

Permit Requirement (specify permit condition #)

Date of Deviation:

Duration of Deviation:

Number of Deviations:

Probable Cause of Deviation:

Response Steps Taken:

Permit Requirement (specify permit condition #)

Date of Deviation:

Duration of Deviation:

Number of Deviations:

Probable Cause of Deviation:

Response Steps Taken:

Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

9 No deviation occurred in this month.

9 Deviation/s occurred in this month.

Deviation has been reported on: _____

Submitted by: _____

Title/Position: _____

Signature: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

Indiana Department of Environmental Management Office of Air Management

Addendum to the Technical Support Document for a Part 70 Operating Permit

Source Name: Thermafiber LLC, Wabash Plant
Source Location: 3711 West Mill Street Extended, Wabash, Indiana 46992
County: Wabash
Part 70 Operating Permit: T 169-6218-00009
SIC Code: 3296
Permit Reviewer: Mark L. Kramer

On August 18, 2000, the Office of Air Management (OAM) had a notice published in the Wabash Plain Dealer, Wabash, Indiana, stating that Thermafiber LLC, Wabash Plant had applied for a Part 70 Operating Permit to operate a mineral wool manufacturing source. The notice also stated that OAM proposed to issue a Part 70 Operating Permit for this operation and provided information on how the public could review the proposed Part 70 Operating Permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this Part 70 Operating Permit should be issued as proposed.

On August 28, 2000, Daniel Wakefield of Thermafiber LLC, submitted comments on the proposed Part 70 Operating Permit. The comments are as follows: The permit language, if changed, has deleted language as ~~strikeouts~~ and new language **bolded**.

Comment 1:

Please change the name of the responsible official to David Holston, current Plant Manager.

Response 1:

The responsible official in Condition A.1 has been changed and has had the following rule cite added which is the definition of a major source in 326 IAC 2-7. IDEM is no longer including the phone number of the contact person, because it is cumbersome to do an administrative amendment every time the telephone number is changed as follows:

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)] [326 IAC 2-7-1(22)]
 The Permittee owns and operates a stationary mineral wool manufacturing source.

Responsible Official: ~~Arnie Cly~~ David Holston
 Phone Number: ~~219-563-2111~~

Upon further review, the OAM has decided to make the following changes to the Part 70 Operating Permit: The permit language is changed to read as follows (deleted language appears as ~~strikeouts~~, new language is **bolded**):

Front Page

1. The expiration has been added to the signature box. The expiration is exactly 5 years after the issuance date. For example, if the permit was issued December 13, 1996, the expiration date would be December 13, 2001.

Operation Permit No.: T 169-6218-00009	
Issued by: Janet G. McCabe, Assistant Commissioner Office of Air Management	Issuance Date: Expiration Date:

Section B

2. Condition B.1 (Permit No Defense) has been deleted. This is not in IC13, but IDEM has the general authority for this in 326 IAC 2-7-15. Therefore, most of this language has been added to Condition B.14 (now B.13)(Permit Shield). Condition B.14 (now B.13) provides for when the possession of a permit does provide a defense and provides that it is only for those requirements in existence at the time of permit issuance. All other B conditions have been re-numbered as a result of this change.

~~B.1 Permit No Defense [IC 13]~~

~~(a) Indiana statutes from IC 13 and rules from 326 IAC, quoted in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a Part 70 permit under 326 IAC 2-7.~~

~~(b) This prohibition shall not apply to alleged violations of applicable requirements for which the Commissioner has granted a permit shield in accordance with 326 IAC 2-7-15, as set out in this permit in the Section B condition entitled "Permit Shield."~~

3. Condition B.3 (now B.2) (Permit Term) has had language added to clarify that amendments, revisions or modifications do not extend the expiration date of the permit. The expiration date will always be five (5) years from the issuance date of the original permit. The expiration date will now be typed in the signature box as well.

B.2 Permit Term [326 IAC 2-7-5(2)]

This permit is issued for a fixed term of five (5) years from the **effective original** date, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. **Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date.**

4. Condition B.8 (now B.7) (Duty to Supplement and Provide Information) The condition has been reworded to match the language in the rule as follows:

B.8 Duty to Supplement and Provide Information [326 IAC 2-7-4(b)] [326 IAC 2-7-5(6)(E)] **[326 IAC 2-7-6(6)]**

(a) The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

The submittal by the Permittee does require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

- (b) The Permittee shall furnish to IDEM, OAM, within a reasonable time, any information that IDEM, OAM, may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34). **Upon request, the Permittee shall also furnish to IDEM, OAM, copies of records required to be kept by this permit or, for information claimed to be confidential, the Permittee may furnish such records directly to the U. S. EPA along with a claim of confidentiality. [326 IAC 2-7-5(6)(E)]**
 - (c) ~~Upon request, the Permittee shall also furnish to IDEM, OAM, copies of records required to be kept by this permit.~~ The Permittee may include a claim of confidentiality in accordance with 326 IAC 17. ~~If requested by IDEM, OAM, or the U.S. EPA, to~~ **When** furnishing copies of requested records directly to U. S. EPA, ~~then the Permittee must furnish record directly to the U. S. EPA.~~ The Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.
5. Condition B.9 (now B.8) (Compliance with Permit Conditions) (c) has been added to clarify that an emergency does constitute a defense in an enforcement action if the Permittee complies with the emergency procedures as follows:

B.9 Compliance with Permit Conditions [326 IAC 2-7-5(6)(A)] [326 IAC 2-7-5(6)(B)]

- (a) The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit, except those specifically designated as not federally enforceable, constitutes a violation of the Clean Air Act and is grounds for:
 - (1) Enforcement action;
 - (2) Permit termination, revocation and reissuance, or modification; or
 - (3) Denial of a permit renewal application.
 - (b) It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
 - (c) **An emergency does constitute an affirmative defense in an enforcement action provided the Permittee complies with the applicable requirements set forth in condition B, Emergency Provisions.**
6. Condition B.10 (now B.9)(Certification) (b) has been modified to clarify when a certification is needed as follows:

B.10 Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)(C)]

- (b) One (1) certification shall be included, ~~on~~ **using** the attached Certification Form, with each submittal **requiring certification**.
7. Condition B.11 (now B.10) (Annual Compliance Certification) paragraph (a) has been revised to clarify that the initial certification is from the date of issuance until December 31. Paragraph (c) has been revised so that it matches the language in the rule.

B.11 Annual Compliance Certification [326 IAC 2-7-6(5)]

- (a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. **The initial certification shall cover the time period from the date of final permit issuance through December 31 of the same year. All subsequent** The certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than July 1 of each year to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

- (b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM, on or before the date it is due.
- (c) The annual compliance certification report shall include the following:
- (1) The appropriate identification of each term or condition of this permit that is the basis of the certification;
 - (2) The compliance status;
 - (3) Whether compliance was ~~based on~~ continuous or intermittent ~~data~~;
 - (4) The methods used for determining **the** compliance **status** of the source, currently and over the reporting period consistent with 326 IAC 2-7-5(3); and
 - (5) Such other facts, as specified in Sections D of this permit, as IDEM, OAM, may require to determine the compliance status of the source.

The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

8. Condition B.12 (now B.11) (Preventive Maintenance Plan) the record keeping requirements have been added to this condition.

B.12 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)] [326 IAC 1-6-3]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit, including the following information on each facility:

- (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
- (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
- (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If, due to circumstances beyond ~~it's~~ the **Permittee's** control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

The PMP and the PMP extension notification do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) The Permittee shall implement the PMPs as necessary to ensure that failure to implement a PMP does not cause or contribute to a violation of any limitation on emissions or potential to emit.
 - (c) A copy of the PMPs shall be submitted to IDEM, OAM, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAM. IDEM, OAM, may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or contributes to any violation. The PMP does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
 - (d) **Records of preventive maintenance shall be retained for a period of at least five (5) years. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.**
9. In Condition B.13 (now B.12)(Emergency Provisions) a reference to the Emergency Occurrence Report Form has been added to Condition B.13(b)(5) (now B.12(b)(5)). The emergency form is for emergencies only, and is no longer an emergency and deviation form. All deviations will now be reported on the Quarterly Deviation and Compliance Monitoring Report. In paragraph (d), part of the first sentence has been deleted. Since this is a Part 70 source, the malfunction rule has been superceded by the emergency rule. Paragraph (f) "compliance" has been changed to "accordance".

B.13 Emergency Provisions [326 IAC 2-7-16]

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation, except as provided in 326 IAC 2-7-16.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed,

contemporaneous operating logs or other relevant evidence that describe the following:

- (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
- (2) The permitted facility was at the time being properly operated;
- (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
- (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAM, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Management, Compliance Section), or

Telephone Number: 317-233-5674 (ask for Compliance Section)

Facsimile Number: 317-233-5967

- (5) For each emergency lasting one (1) hour or more, the Permittee submitted **the attached Emergency Occurrence Report Form or its equivalent** notice, either ~~in writing by mail or facsimile, of the emergency to:~~

Indiana Department of Environmental Management
Compliance Branch, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-7-5(3)(C)(ii) and must contain the following:

- (A) A description of the emergency;
- (B) Any steps taken to mitigate the emissions; and
- (C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions) ~~for sources subject to this rule after the effective date of this rule.~~ This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.

- (e) IDEM, OAM, may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4-(c)(10) be revised in response to an emergency.
- (f) Failure to notify IDEM, OAM, by telephone or facsimile of an emergency lasting more than one (1) hour in ~~compliance~~ **accordance** with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.
- (g) Operations may continue during an emergency only if the following conditions are met:
 - (1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.
 - (2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:
 - (A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and
 - (B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value.

Any operation shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.

10. Condition B.14 (now B.13)(Permit Shield)has incorporated some of the language from Condition B.1. In Condition B.14(d) some of the language has been removed because it is unnecessary and would be contradictory to IDEM's revision of operating permits as follows:

B.14 Permit Shield [326 IAC 2-7-15] [326 IAC 2-7-20] [326 IAC 2-7-12]

- (a) Pursuant to 326 IAC 2-7-15, the Permittee has been granted a permit shield. The permit shield provides that compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided that either the applicable requirements are included and specifically identified in this permit or the permit contains an explicit determination or concise summary of a determination that other specifically identified requirements are not applicable. **The Indiana statutes from IC 13 and rules from 326 IAC, referenced in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a Part 70 permit under 326 IAC 2-7 or for applicable requirements for which a permit shield has been granted.**

This permit shield does not extend to applicable requirements which are promulgated after the date of issuance of this permit unless this permit has been modified to reflect such new requirements.

- (b) This permit shall be used as the primary document for determining compliance with applicable requirements established by previously issued permits. All previously issued operating permits are superseded by this permit.

- (c) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, ~~including any term or condition from a previously issued construction or operation permit,~~ IDEM, OAM, shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued. The permit shield shall continue in effect so long as the Permittee is in compliance with the compliance order.
 - (d) No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application. Erroneous information means information that the Permittee knew to be false, or in the exercise of reasonable care should have been known to be false, at the time the information was submitted.
 - (e) Nothing in 326 IAC 2-7-15 or in this permit shall alter or affect the following:
 - (1) The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the U.S. EPA under Section 303 of the Clean Air Act;
 - (2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of this permit's issuance;
 - (3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act; and
 - (4) The ability of U.S. EPA to obtain information from the Permittee under Section 114 of the Clean Air Act.
 - (f) This permit shield is not applicable to any change made under 326 IAC 2-7-20(b)(2) (Sections 502(b)(10) of the Clean Air Act changes) and 326 IAC 2-7-20(c)(2) (trading based on State Implementation Plan (SIP) provisions).
 - (g) This permit shield is not applicable to modifications eligible for group processing until after IDEM, OAM, has issued the modifications. [326 IAC 2-7-12(c)(7)]
 - (h) This permit shield is not applicable to minor Part 70 permit modifications until after IDEM, OAM, has issued the modification. [326 IAC 2-7-12(b)(7)]
11. Condition B.16 (now B.15) (Deviations from Permit Requirements and Conditions) has been revised because IDEM is no longer requiring sources to report deviations in 10 days. Sources will report deviations quarterly on the Quarterly Deviation and Compliance Monitoring Report. References to the emergency report have been removed since deviations will not be reported on that form anymore. There is no longer a 5% exception for reporting deviations, since IDEM relaxed the ten (10) day notification to a quarterly report.

B.16 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]

- (a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provisions), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management
Compliance Branch **Data Section**, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

~~within ten (10) calendar days from the date of the discovery of the deviation~~ **using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent.** ~~except for the failure to perform the monitoring or record the information required by the compliance monitoring provisions of Section D unless such failure exceeds 5% of the required data in any calendar quarter.~~ **Deviations that are required to be reported by an applicable requirement shall be reported according to the schedule stated in the applicable requirement and do not need to be included in this report.**

The notification by the Permittee does require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

- (b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit or a rule. It does not include:

(1) An excursion from compliance monitoring parameters as identified in Section D of this permit unless tied to an applicable rule or limit; or

~~(2) An emergency as defined in 326 IAC 2-7-1(12); or~~

~~(3)~~**(2)** Failure to implement elements of the Preventive Maintenance Plan unless such failure has caused or contributed to a deviation.

A Permittee's failure to take the appropriate response step when an excursion of a compliance monitoring parameter has occurred is a deviation.

- (c) **Emergencies shall be included in the Quarterly Deviation and Compliance Monitoring Report.**

~~(c) Written notification shall be submitted on the attached Emergency/Deviation Occurrence Reporting Form or its substantial equivalent. The notification does not need to be certified by the “responsible official” as defined by 326 IAC 2-7-1(34).~~

~~(d) Proper notice submittal under 326 IAC 2-7-16 satisfies the requirement of this subsection.~~

12. Condition B.19 (now B.18) (Permit Amendment or Modification) 326 IAC 2-7-4(f) revised to clarify that all applications need to be certified by the responsible official. EPA has also requested this change.

B.19 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]

(a) Permit amendments and modifications are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.

(b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

Any such application should be certified by the “responsible official” as defined by 326 IAC 2-7-1(34) ~~only if a certification is required by the terms of the applicable rule.~~

- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

13. Condition B.21 (now B.20) (Operational Flexibility) (b) has been reorganized. Paragraph (b)(1) was deleted so that this condition would be consistent with the language in the rule as follows:

B.21 Operational Flexibility [326 IAC 2-7-20] [326 IAC 2-7-10.5]

- (b) The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-7-20(a). ~~and the following additional conditions:~~

- ~~(1) The permit shield, described in 326 IAC 2-7-15, shall not apply to any change made under 326 IAC 2-7-20(b).~~

- (2) For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:

- ~~(A)~~(1) A brief description of the change within the source;

- ~~(B)~~(2) The date on which the change will occur;

- ~~(C)~~(3) Any change in emissions; and

- ~~(D)~~(4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

14. Condition B.22 (now B.21) (Source Modification Requirement) has had the cite 326 IAC 2 added to make the condition more complete. The language "applicable provisions" has been removed because it is unnecessary as follows:

B.22 Source Modification Requirement [326 IAC 2] [326 IAC 2-7-10.5]

A modification, construction, or reconstruction is governed by ~~the applicable provisions of 326 IAC 2 and~~ 326 IAC 2-7-10.5.

15. Condition B.23 (now B.22) (Inspection and Entry), the wording "At reasonable times" has been deleted because neither the rule nor the statute limits IDEM. IDEM could ask for these at any time.

B.23 Inspection and Entry [326 IAC 2-7-6(2)] [IC 13-14-2-2]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAM, and U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a Part 70 source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

- (b) Have access to and copy, ~~at reasonable times~~, any records that must be kept under the conditions of this permit;
 - (c) Inspect, ~~at reasonable times~~, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
 - (d) Sample or monitor, ~~at reasonable times~~, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
 - (e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements. ~~[326 IAC 2-7-6(6)]~~
16. Condition B.24 (now B.23) (Transfer of Ownership or Operational Control) has been revised to clarify that 326 IAC 2-7-4(f) requires all applications to be certified by the responsible official. EPA has also requested this change.

B.24 Transfer of Ownership or Operational Control [326 IAC 2-7-11]

- (a) The Permittee must comply with the requirements of 326 IAC 2-7-11 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.
 - (b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

The application which shall be submitted by the Permittee does ~~not~~ require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
 - (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]
17. Condition B.25 (now B.24) (Annual Fee Payment) has had the rule cite added to paragraph (a) as follows:

B.25 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)]

- (a) The Permittee shall pay annual fees to IDEM, OAM, within thirty (30) calendar days of receipt of a billing. **Pursuant 326 IAC 2-7-19(b)**, if the Permittee does not receive a bill from IDEM, OAM, the applicable fee is due April 1 of each year.
- (b) Except as provided in 326 IAC 2-7-19(e), failure to pay may result in administrative enforcement action or revocation of this permit.
- (c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-0425 (ask for OAM, Technical Support and Modeling Section), to determine the appropriate permit fee.

Section C

- 18 Condition C.6 (Operation of Equipment) has been revised to clarify the condition as follows:

C.6 Operation of Equipment [326 IAC 2-7-6(6)]

Except as otherwise provided **by statute, rule, or** in this permit, all air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation.

19. Condition C.7 (Stack Height) has had language added to clarify which parts of 326 IAC 1-7 are not federally enforceable.

C.7 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted. **The provisions of 326 IAC 1-7-2, 326 IAC 1-7-3(c) and (d), 326 IAC 1-7-4(d)(3), (e), and (f), and 326 IAC 1-7-5(d) are not federally enforceable.**

20. Condition C.8 (Asbestos Abatement Projects) has had the rule cite in the title changed to make it more generalized as follows:.

C.8 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] ~~[40 CFR 61.140]~~ **[40 CFR 61, Subpart M]**

21. Condition C.9 (Performance Testing) has had the word "within" changed to "not later than" as follows:

C.9 Performance Testing [326 IAC 3-6]

- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAM ~~within~~ **not later than** forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAM, if the source submits to IDEM, OAM, a reasonable written explanation ~~within~~ **not later than** five (5) days prior to the end of the initial forty-five (45) day period.

22. Condition C.11 (Compliance Monitoring) - There are times when compliance monitoring is required by a MACT that the source does not have to comply with yet. Therefore, language has been added to clarify that the permit will specify when Compliance Monitoring does not have to start in ninety (90) days. The same idea applies to new units, if the MACT does not apply yet, IDEM would not expect the source to start compliance monitoring.

C.11 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

Unless otherwise specified in this permit, all monitoring and record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within ninety (90) days, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification of the reasons for the inability to meet this date.

The notification which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Unless otherwise specified in the approval for the new emission unit(s), compliance monitoring for new emission units or emission units added through a source modification shall be implemented when operation begins.

23. Condition C.12 (Maintenance of Emission Monitoring Equipment) has been added as follows:

C.12 Maintenance of Emission Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]

- (a) In the event that a breakdown of the emission monitoring equipment occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem. To the extent practicable, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less frequent than required in Section D of this permit until such time as the monitoring equipment is back in operation. In the case of continuous monitoring, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less often than once an hour until such time as the continuous monitor is back in operation.
- (b) The Permittee shall install, calibrate, quality assure, maintain, and operate all necessary monitors and related equipment. In addition, prompt corrective action shall be initiated whenever indicated.

24. Condition C.12 (now C.13) (Monitoring Methods) has had the following rule cites added.

C.12 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, **40 CFR 60 Appendix B, 40 CFR 63**, or other approved methods as specified in this permit.

25. Condition C.13 (now C.14) (Pressure Gauge Specifications) has had rule cites added. Language has also been added for other instrument specifications as follows.

C.13 Pressure Gauge and Other Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

- (a) Whenever a condition in this permit requires the measurement of pressure drop across any part of the unit or its control device, the gauge employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent ($\pm 2\%$) of full scale reading.
- (b) The Permittee may request the IDEM, OAM approve the use of a pressure gauge or other instrument that does not meet the above specifications provided the Permittee can demonstrate an alternative pressure gauge or other instrument specification will adequately ensure compliance with permit conditions requiring the measurement of pressure drop or other parameters.

26. Condition C.14 (now C.15) (Emergency Reduction Plans) has had (c) and (d) deleted as follows.

C.15 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]

Pursuant to 326 IAC 1-5-2 (Emergency Reduction Plans; Submission):

- (a) The Permittee prepared and submitted written emergency reduction plans (ERPs) consistent with safe operating procedures on July 2, 1996.
- (b) If the ERP is disapproved by IDEM, OAM, the Permittee shall have an additional thirty (30) days to resolve the differences and submit an approvable ERP.
- ~~(c) These ERPs shall state those actions that will be taken, when each episode level is declared, to reduce or eliminate emissions of the appropriate air pollutants.~~
- ~~(d) Said ERPs shall also identify the sources of air pollutants, the approximate amount of reduction of the pollutants, and a brief description of the manner in which the reduction will be achieved.~~
- ~~(e)~~(c) Upon direct notification by IDEM, OAM, that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level. [326 IAC 1-5-3]

27. Condition C.15 (now C.16) (Risk Management Plan) has been revised to reflect the fact that if a source is subject to 40 CFR 68, they should have already submitted a Risk Management Plan as follows:

C.16 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68.215]

If a regulated substance, subject to 40 CFR 68, is present at a source in more than a threshold quantity, 40 CFR 68 is an applicable requirement and the Permittee shall submit:

- (a) A compliance schedule for meeting the requirements of 40 CFR 68 ~~by the date provided in 40 CFR 68.10(a);~~ or
- (b) As a part of the annual compliance certification submitted under 326 IAC 2-7-6(5), a certification statement that the source is in compliance with all the requirements of 40 CFR 68, including the registration and submission of a Risk Management Plan (RMP); and

All documents submitted pursuant to this condition shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

28. Condition C.16 (now C.17) (Compliance Monitoring Plan - Failure to Take Response Steps) has had the following changes made: (a) "of" was added, (c) "or" has been replaced with a period, (f) "(5%)" has been added to be consistent with the rest of the permit and changes were made to (a)(5) and (f).

C.17 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

- (a) The Permittee is required to implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. The compliance monitoring plan can be either an entirely new document, consist in whole ~~of~~ information contained in other documents, or consist of a combination of new information and information contained in other documents. If the compliance monitoring plan incorporates by reference information contained in other documents, the Permittee shall identify as part of the compliance monitoring plan the documents in which the information is found. The elements of the compliance monitoring plan are:

- (1) This condition;
 - (2) The Compliance Determination Requirements in Section D of this permit;
 - (3) The Compliance Monitoring Requirements in Section D of this permit;
 - (4) The Record Keeping and Reporting Requirements in Section C (Monitoring Data Availability, General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this permit; and
 - (5) A Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. CRP's shall be submitted to IDEM, OAM upon request and shall be subject to review and approval by IDEM, OAM. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee and maintained on site, and is comprised of:
 - (A) Reasonable response steps that may be implemented in the event that compliance related information indicates that a response step is needed pursuant to the requirements of Section D of this permit; and
 - (B) A time schedule for taking reasonable response steps including a schedule for devising additional response steps for situations that may not have been predicted.
- (b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition. Failure to take reasonable response steps ~~shall~~ **may** constitute a violation of the permit.
- (c) Upon investigation of a compliance monitoring excursion, the Permittee is excused from taking further response steps for any of the following reasons:
- (1) A false reading occurs due to the malfunction of the monitoring equipment. This shall be an excuse from taking further response steps providing that prompt action was taken to correct the monitoring equipment.
 - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied.;~~or~~
 - (3) An automatic measurement was taken when the process was not operating.;~~or~~
 - (4) The process has already returned or is returning to operating within "normal" parameters and no response steps are required.
- (d) Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.
- (e) All monitoring required in Section D shall be performed at all times the equipment is operating. If monitoring is required by Section D and the equipment is not operating, then the Permittee may record the fact that the equipment is not operating or perform the required monitoring.

- (f) ~~If for reasons beyond its control, the Permittee fails to perform the monitoring and record keeping as required by Section D, then the reasons for this must be recorded.~~
- (1) ~~At its discretion, IDEM may excuse the Permittee's failure to perform the monitoring and record keeping as required by Section D, if the Permittee provides such failure providing adequate justification is documented and documents that such failures do not exceed five percent (5%) of the operating time in any quarter.~~
- (2) Temporary, unscheduled unavailability of qualified staff shall be considered a valid reason for failure to perform the monitoring or record keeping requirements in Section D.
29. In Condition C.17 (now C.18) (Actions Related to Noncompliance Demonstrated by a Stack Test), the phrase "corrective actions" has been changed to "response actions" to be consistent with the rest of the permit as follows:
- C.17 ~~Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5]~~[326 IAC 2-7-6]
- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate ~~corrective~~ **response** actions. The Permittee shall submit a description of these ~~corrective~~ **response** actions to IDEM, OAM, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the ~~corrective~~ **response** actions are being implemented.
30. Condition C.18 (now C.19) (Emission Statement) the word "estimated" was added to (a)(1) and (a)(2) because that is how 326 IAC 2-6 describes emissions as follows.
- C.18 ~~Emission Statement [326 IAC 2-7-5(3)(C)(iii)] [326 IAC 2-7-5(7)] [326 IAC 2-7-19(c)]~~[326 IAC 2-6]
- (a) The Permittee shall submit an annual emission statement certified pursuant to the requirements of 326 IAC 2-6, that must be received by July 1 of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. The annual emission statement shall meet the following requirements:
- (1) Indicate **estimated** actual emissions of criteria pollutants from the source, in compliance with 326 IAC 2-6 (Emission Reporting);
- (2) Indicate **estimated** actual emissions of other regulated pollutants (as defined by 326 IAC 2-7-1) from the source, for purposes of Part 70 fee assessment.
31. Condition C.19 (now C.20) (General Record Keeping Requirements) the word "monitoring" was removed so that the condition will seem more generalized to all record keeping, the word "reports" was added to clarify that the source must keep copies of those as well. Paragraphs (b) and (c) have been removed because they were unnecessary.
- C.19 ~~General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6]~~
- (a) Records of all required ~~monitoring~~ data, **reports** and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a

reasonable time.

~~(b) — Records of required monitoring information shall include, where applicable:~~

~~(1) — The date, place, and time of sampling or measurements;~~

~~(2) — The dates analyses were performed;~~

~~(3) — The company or entity performing the analyses;~~

~~(4) — The analytic techniques or methods used;~~

~~(5) — The results of such analyses; and~~

~~(6) — The operating conditions existing at the time of sampling or measurement.~~

~~(c) — Support information shall include, where applicable:~~

~~(1) — Copies of all reports required by this permit;~~

~~All original strip chart recordings for continuous monitoring instrumentation;~~

~~(3) — All calibration and maintenance records;~~

~~(4) — Records of preventive maintenance.~~

~~(d)~~**(b) Unless otherwise specified in this permit**, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

32. Condition C.20 (now C.21)(General Reporting Requirements) has changed the Semi-Annual Compliance Monitoring Report to the Quarterly Deviation and Compliance Monitoring Report. References to the emergency report has been deleted. All the information is in Condition B.13. In paragraph (d) IDEM has clarified that the report does need to be certified by the responsible official. This change is also reflected in all the D sections and the reporting forms. EPA has also requested this change.

C.20 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11]

(a) ~~To affirm that the source has met all the compliance monitoring requirements stated in this permit~~ The source shall submit ~~a~~ **the attached** Quarterly or Semi-Annual **Deviation and Compliance Monitoring Report or its equivalent**. Any deviation from the **permit** requirements, ~~and~~, the date(s) of each deviation, **the cause of the deviation, and the response steps taken** must be reported. **This report shall be submitted within thirty (30) days of the end of the reporting period.** The **Quarterly Deviation and Compliance Monitoring Report** shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM, on or before the date it is due.
- (d) Unless otherwise specified in this permit, any quarterly or semi-annual report required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. The reports do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- ~~(e) All instances of deviations as described in Section B-Deviations from Permit Requirements Conditions must be clearly identified in such reports. The Emergency/Deviation Occurrence Report does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).~~
- ~~(f) Any corrective actions or response steps taken as a result of each deviation must be clearly identified in such reports.~~
- ~~(g)~~(e) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years.

Section D

33. Section D.1, Units (c), (e), (f), (g), & (h) [blowchambers #4 & #2, #2 line trimming/sizing section, #2 line cooling section, and boiler #1] are not subject to the NESHAP for Mineral Wool Production. For clarity on this, wording was added to the Conditions D.1.1 and D.1.18 (now D.1.26) to specify that only the cupolas and the curing oven are subject to the NESHAP provisions with additional rule cites as follows:

D.1.1 General Provisions Relating to HAPs [326 IAC 20-1-1] [40 CFR Part 63, Subpart A]

The provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated as 326 IAC 20-1-1, apply to the facility **two (2) cupolas (EU-P2 and EU-P4) and the curing oven (EU-P7)** described in this section except when otherwise specified in 40 CFR Part 63, Subpart DDD.

D.1.18 Reporting Requirements [40CFR 63.10(d) and 40CFR 63.1193]

- (a) A semi-annual summary of the information to document compliance with the natural gas fired boiler certification, shall be submitted to the address listed in Section C - General Reporting Requirements, using the reporting form located at the end of this permit, or their equivalent, within thirty (30) days after the end of the six (6) month period being reported.
 - (b) Pursuant to 40 CFR Part 63.1193, the Permittee shall prepare and submit reports to the IDEM, OAM as required by this subpart and 40CFR Part 63.10 of the general provisions in Subpart A of this part **for the two (2) cupolas (EU-P2 and EU-P4) and the curing oven (EU-P7)**. These reports include, but are not limited to, the following:
34. In Condition D.1.2 (Mineral Wool Production NESHAP [40 CFR 63, Subpart DDD], The alternate compliance date has been deleted. In addition, Conditions D.1.2(b) and D.1.2(c) have been moved to separate new Conditions D.1.3 and D.1.4 for clarity. Conditions D.1.2 (d) and D.1.2(f) have been relocated as separate new Conditions D.1.9 and D.1.10 in the Compliance Determinations Requirements Section of the permit. Condition D.1.2(e) has been deleted.

D.1.2 Mineral Wool Production NESHAP [40 CFR 63, Subpart DDD]

- (a) Pursuant to 40 CFR 63.1180, the existing mineral wool cupolas, known as EU-P2 and EU-P4, and curing oven, known as EU-P7 operations are subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP), 326 IAC **20-14**, (40 CFR 63, Subpart DDD), with a compliance **date of June 2, 2002.**
- (1) ~~June 2, 2002; or~~
- (2) ~~June 3, 2003 provided that the Permittee applies for and receives a one (1)-year extension under Section 112(i)(3)(B) of the Act.~~
- (b) ~~Pursuant to 40CFR Part 63.1178, at all times, except during periods of startup, shutdown, or malfunction, the particulate matter (PM) emissions from cupola #2 and cupola #4, known as EU-P2 and EU-P4, shall not exceed 0.10 pound of PM per ton of melt.~~
- (c) ~~Pursuant to 40CFR Part 63.1179, at all times, except during periods of startup, shutdown, or malfunction, the formaldehyde emissions from curing oven #2, known as EU-P7, shall meet either of the following:~~
- (1) ~~0.06 pound of formaldehyde per ton of melt, or~~
- (2) ~~Shall be reduced by at least eighty (80%) percent from the uncontrolled formaldehyde emissions.~~
- (d) ~~Pursuant 40 CFR 63.1183, the Permittee shall maintain the free-formaldehyde content of each resin lot and the formaldehyde content of each binder formulation at or below the specification ranges established during the performance test.~~
- (e) ~~Pursuant to 40 CFR 63.1183 with prior approval from the IDEM, OAM, the Permittee may do short-term experimental production runs using resin where the free-formaldehyde content, or binder formulations where the formaldehyde content, is higher than the specification ranges of the resin and binder used during previous performance tests, or using experimental pollution prevention process modifications without first doing additional performance tests. Notification of intent to perform a short-term experimental production run must include the following information:~~
- (1) ~~The purpose of the experimental run.~~
- (2) ~~The affected production process.~~
- (3) ~~How the resin free-formaldehyde content or binder formulation will deviate from previously approved levels or what the experimental pollution prevention process modifications are.~~
- (4) ~~The duration of the experimental run.~~
- (5) ~~The date and time of the experimental run.~~
- (6) ~~A description of any emissions testing to be done during the experimental run.~~
- (f) Pursuant to 40 CFR 63.1183, the Permittee shall maintain the operating temperature of the incinerator at all times, except during periods of startup, shutdown, or malfunction, so that the average operating temperature for each three (3)-hour block period never falls below the average temperature established during the performance test.

D.1.3 Particulate Matter (PM) Emission Limitation for Cupolas [40CFR Part 63.1178]

Pursuant to 40CFR Part 63.1178, at all times, except during periods of startup, shutdown, or malfunction, the particulate matter (PM) emissions from cupola #2 and cupola #4, known as EU-P2 and EU-P4, shall not exceed 0.10 pound of PM per ton of melt.

D.1.4 Formaldehyde Emission Limitation for Curing Ovens [40CFR Part 63.1179]

Pursuant to 40CFR Part 63.1179, at all times, except during periods of startup, shutdown, or malfunction, the formaldehyde emissions from curing oven #2, known as EU-P7, shall meet either of the following:

- (a) 0.06 pound of formaldehyde per ton of melt, or
- (b) Shall be reduced by at least eighty (80%) percent from the uncontrolled formaldehyde emissions.

D.1.9 Free-formaldehyde content for Curing Ovens [40CFR Part 63.1183]

Pursuant to 40 CFR 63.1183, the Permittee shall maintain the free-formaldehyde content of each resin lot and the formaldehyde content of each binder formulation at or below the specification ranges established during the performance test.

D.1.10 Incinerator Operating Temperature Maintenance [40CFR Part 63.1183]

Pursuant to 40 CFR 63.1183, the Permittee shall maintain the operating temperature of the incinerator at all times, except during periods of startup, shutdown, or malfunction, so that the average operating temperature for each three (3)-hour block period never falls below the average temperature established during the performance test.

35. Condition D.1.11 has been added to specify how to demonstrate compliance with the emission limits established in the Emission Limitation and Standards subsection of Section D.1 as follows:

D.1.11 Compliance Demonstration [40CFR Part 63.1190]

- (a) The Permittee shall use the following equation to demonstrate compliance with the PM emission limit specified in Condition D.1.3 for the cupolas:

$$E = \frac{C \cdot Q \cdot K_1}{P}$$

where: E = Emission rate of PM, kg/Mg (lb/ton) of melt.
C = Concentration of PM, g/dscm (gr/dscf).
Q = Volumetric flow rate of exhaust gases, dscm/hr (dscf/hr).
K₁ = Conversion factor, 1 kg/1,000 g (1 lb/7,000 gr).
P = Average melt rate, Mg/hr (ton/hr).

- (b) The Permittee shall use the following equation to demonstrate compliance with the formaldehyde emission limit specified in Condition D.1.4 for the curing oven:

$$E = \frac{C \cdot MW \cdot Q \cdot K_1 \cdot K_2}{K_3 \cdot P \cdot 10^6}$$

where: E = Emission rate of measured pollutant, kg/Mg (lb/ton) of melt.
C = Measured volume fraction of pollutant, ppm.
MW = Molecular weight of measured pollutant, g/g-mole:
CO = 28.01, Formaldehyde = 30.03.
Q = Volumetric flow rate of exhaust gases, dscm/hr (dscf/hr).
K₁ = Conversion factor, 1 kg/1,000 g (1 lb/453.6 g).
K₂ = Conversion factor, 1,000 L/m³ (28.3 L/ft³).
K₃ = Conversion factor, 24.45 L/g-mole.
P = Average melt rate, Mg/hr (ton/hr).

- (c) The Permittee shall use the following equation to demonstrate compliance with the formaldehyde percent reduction performance standard specified in Condition D.1.4 for the curing oven:

$$\%R = \frac{L_i - L_o}{L_i} \cdot 100$$

where: %R = Percent reduction, or collection efficiency of the control device.
L_i = Inlet loading of pollutant, kg/Mg (lb/ton).
L_o = Outlet loading of pollutant, kg/Mg (lb/ton).

36. In Condition D.1.7 (now D.1.12) the specific NESHAP rule cite has been added to the title line and has been modified so that the specific test methods are not specified. All test methods have to be approved by Compliance Data Section when a protocol is submitted. Language has been added to clarify which condition the testing is needed to show compliance.

D.1.7 Testing Requirements [326 IAC 2-7-6(1)] [326 IAC 2-1.1-11] [40 CFR Part 63.1185(a) and 40 CFR Part 63.1188]

The Permittee shall complete the following performance testing to demonstrate compliance with the requirements of 326 IAC 6-3-2 and Subpart DDD no later than the June 2, 2002; or by June 3, 2003 if the Permittee applies for and receives a one- (1-)year extension under section 112(i)(3)(B) of the Clean Air Act.

- (a) ~~During the period between 30 and 36 months after issuance of this permit, The Permittee shall perform testing in order to demonstrate compliance with Condition D.1.6 of the two (2) cupolas (EU-P2 and EU-P4) for PM utilizing Methods 5 or 17 (40 CFR 60, Appendix A), or other methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.~~
- (b) The Permittee shall conduct a performance test **in order to demonstrate compliance with Condition D.1.3** of each cupola for PM as specified in 40 CFR 63.1188 utilizing ~~Method 5 (40 CFR Part 60, Appendix A)~~ or other methods as approved by the Commissioner and show compliance with the PM emission limits while the bag leak detection system is installed, operational, and properly adjusted.
- (c) The Permittee shall conduct a formaldehyde performance test **in order to demonstrate compliance with Condition D.1.4** of the curing oven **for formaldehyde** as specified in 40 CFR Part 63.1188 utilizing ~~Method 318 (40 CFR Part 60, Appendix A)~~ or other methods as approved by the Commissioner while manufacturing the product that requires a binder formulation made with the resin containing the highest free-formaldehyde content specification range. The Permittee shall show compliance with the formaldehyde emission

limits while the device for measuring incinerator operating temperature is installed, operational, and properly calibrated. The Permittee shall establish the average operating temperature as specified in 40CFR Part 63.1185(a).

During the performance test for the curing oven that uses the binder formulation made with the resin containing the highest free-formaldehyde content specification range, record the free-formaldehyde content specification range of the resin used, and the formulation of the binder used, including the formaldehyde content and binder specification.

37. Condition D.1.8 (now D.1.13) (Particulate Matter (PM)) has had language added to clarify which conditions require that the baghouse and media filters are operated for compliance.

D.1.8 Particulate Matter (PM)

- (a) **In order to comply with Conditions D.1.3 and D.1.6,** the baghouses as well as the baghouses and the multiclone in series for PM control shall be in operation and control emissions from the cupolas and the trimming section, respectively, at all times that the cupolas and/or trimming section are in operation.
- (b) **In order to comply with Condition D.1.6,** the media filters for PM control shall be in operation at all times when the blowchambers #2 and/or #4 are in operation.

38. Condition D.1.9 (now D.1.14) (Visible Emission Notations) paragraph (e), D.1.10 (now D.1.15) (Parametric Monitoring), and D.1.12 (now D.1.17) (Broken or Failed Bag Detection) in paragraph (a), language about failure to take response steps has been added. This clarifies that not taking a response step will be considered a permit violation.

D.1.9 Visible Emissions Notations

- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. **Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.**

D.1.10 Parametric Monitoring

- (a) The Permittee shall record the total static pressure drop across the multiclones and side stream baghouses used in conjunction with the two (2) cupolas, at least once per shift when either or both of the cupolas are in operation when venting to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the multiclones and baghouses shall be maintained within the range of 3.0 and 7.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading. **Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.**
- (b) The Permittee shall record the total static pressure drop across the baghouse used in conjunction with the trimming/sizing section, at least once per shift when the trimming/sizing processes are in operation when venting to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the baghouse shall be maintained within the range of 4.0 and 8.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure

reading is outside of the above mentioned range for any one reading. **Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.**

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge **and Other Instrument** Specifications, of this permit, shall be subject to approval by IDEM, OAM, and shall be calibrated at least once every six (6) months.

D.1.12 Broken or Failed Bag Detection

In the event that bag failure has been observed.

- (a) **For multi-compartment units**, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. **Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B- Emergency Provisions).** Within eight (8) **business** hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) **business** hours of discovery of the failure and shall include a timetable for completion. ~~Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B- Emergency Provisions).~~ **Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.**
 - (b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).
39. Condition D.1.14 (now D.1.19 and D.1.20) has been split into two (2) conditions and to clarified that it applies to the cupolas and the curing oven. Condition D.1.14(a) (now D.1.19(a) has had the word-ing "To be in compliance with the PM emission limit" added. Condition D.1.14(b) has been deleted and reference to these requirements has been added to Condition D.1.14(a)(1). The introduction to Condition D.1.14(d) (now Condition D.1.19(c) has been clarified that the condition refers to operating limits. Condition D.1.14(d)(3) has been deleted because this part of the NESHAP only applies to new or reconstructed cupolas. Rule cites have been added as follows:

D.1.14 Cupola Bag Leak Detection System ~~or Incinerator Operating Temperature~~ [40CFR Part 63.1178, 1181, 1184, 1185] [40CFR Part 64.8(b) through (d)]

- (a) **To be in compliance with the PM emission limit,** ~~p~~Pursuant to 40CFR Part 63.1181, the Permittee shall:
 - (1) Install, adjust, maintain, and continuously operate a bag leak detection system for each fabric filter **pursuant to 40CFR Part 63.1184.**
 - (2) Begin corrective actions specified in the operations, maintenance, and monitoring plan required by 40CFR Part 63.1187 within one (1) hour after the alarm on a bag leak detection system sounds. Complete the corrective actions in a timely manner.
 - (3) Develop and implement a written QIP consistent with compliance assurance monitoring requirements of 40CFR Part 64.8(b) through (d) when the alarm on a bag

leak detection system sounds for more than five (5%) percent of the total operating time in a six (6)-month reporting period.

- (b) Pursuant to 40CFR Part 63.1184, a bag leak detection system must meet the following requirements:
- (1) The bag leak detection system must be certified by the manufacturer to be capable of detecting PM emissions at concentrations of ten (10) milligrams per actual cubic meter (0.0044 grains per actual cubic foot) or less.
 - (2) The sensor on the bag leak detection system must provide output of relative PM emissions.
 - (3) The bag leak detection system must have an alarm that will sound automatically when it detects an increase in relative PM emissions greater than a preset level.
 - (4) The alarm must be located in an area where appropriate plant personnel will be able to hear it.
 - (5) For a positive-pressure fabric filter, each compartment or cell must have a bag leak detector. For a negative-pressure or induced-air fabric filter, the bag leak detector must be installed downstream of the fabric filter. If multiple bag leak detectors are required (for either type of fabric filter), detectors may share the system instrumentation and alarm.
 - (6) Each triboelectric bag leak detection system must be installed, operated, adjusted, and maintained so that it follows EPA's "Fabric Filter Bag Leak Detection Guidance" (EPA-454/R-98-015, September 1997). Other bag leak detection systems must be installed, operated, adjusted, and maintained so that they follow the manufacturer's written specifications and recommendations.
 - (7) At a minimum, initial adjustment of the system must consist of establishing the baseline output in both of the following ways:
 - (A) Adjust the range and the averaging period of the device.
 - (B) Establish the alarm set points and the alarm delay time.
 - (8) After initial adjustment, the range, averaging period, alarm set points, or alarm delay time may not be adjusted except as specified in the operations, maintenance, and monitoring plan required by 40CFR Part 63.1187. In no event may the range be increased by more than one hundred (100%) percent or decreased by more than fifty (50%) percent over a 365-day period unless a responsible official as defined in 40CFR Part 63.2 of the general provisions in Subpart A of this part certifies in writing to the IDEM, OAM that the fabric filter has been inspected and found to be in good operating condition.
- (c) Pursuant to 40CFR Part 63.1185(b), to comply with the requirements for maintaining the operating temperature of an incinerator after the performance test, the Permittee shall measure and record the average operating temperature of the incinerator as required by 40CFR Parts 63.1182 and 63.1183 of this subpart. This average operating temperature of the incinerator is based on the arithmetic average of the one-hour average temperatures for each consecutive three-hour period and is determined in the same manner described in paragraphs (a)(1) through (a)(4) of 40CFR Part 1185.

(bd) Pursuant to 40CFR Part 63.1178, **the operating limits** for each cupola **are as follows**:

- (1) Begin within one hour after the alarm on a bag leak detection system sounds, and complete in a timely manner, corrective actions as specified in by the operations, maintenance, and monitoring plan required by 40CFR 63.1187~~78~~, and
- (2) When the alarm on a bag leak detection system sounds for more than five (5%) percent of the total operating time in a six (6)-month reporting period, the Permittee shall develop and implement a written quality improvement plan (QIP) consistent with the compliance assurance monitoring requirements of 40CFR 64.8(b)–(d).
- (3) ~~Or the Permittee shall maintain the operating temperature of the incinerator so that the average operating temperature for each three-hour block period never falls below the average temperature established during the performance test.~~

D.1.20 Incinerator Operating Temperature [40CFR Part 63.1185]

Pursuant to 40CFR Part 63.1185(b), to comply with the requirements for maintaining the operating temperature of an incinerator after the performance test, the Permittee shall measure and record the average operating temperature of the incinerator as required by 40 CFR Parts 63.1182 and 63.1183 of this subpart. This average operating temperature of the incinerator is based on the arithmetic average of the one-hour average temperatures for each consecutive three-hour period and is determined in the same manner described in paragraphs (a)(1) through (a)(4) of 40CFR Part 1185.

40. Condition D.1.15 (now D.1.21 and D.1.22) has been split into two (2) conditions with appropriate cites. Condition D.1.15(a) has been deleted because this part of the NESHAP only applies to new or reconstructed cupolas. The introduction to Condition D.1.15(b) (now Condition D.1.21) has clarified that the condition refers to operating limits.

D.1.15 Free-Formaldehyde Content or Incinerator Operating Temperature for the Curing Oven [40CFR Part 63.1179] [40CFR Part 63.1183]

(a) Pursuant to 40CFR Part 63.1182~~3~~, the Permittee shall:

- (1) Install, calibrate, maintain, and operate a device that continuously measures the operating temperature in the firebox of each thermal incinerator.
- (2) Following the performance test for the curing oven, the Permittee shall monitor and record the free-formaldehyde content of each resin lot and the formulation of each batch of binder used, including the formaldehyde content.
- (3) **Maintain the free-formaldehyde content of each resin lot and the formaldehyde content of each binder formulation at or below the specification ranges established during the performance test.**

(ba) Pursuant to 40CFR Part 63.1179, **the Permittee shall meet the following operating limits**:

- (4) ~~The Permittee shall M~~**maintain the free-formaldehyde content of each resin lot and the formaldehyde content of each binder formulation at or below the specification ranges of the resin and binder used during the performance test.**
- (2) ~~Or the Permittee shall maintain the operating temperature of the incinerator so that the average operating temperature for each three-hour block period never falls below the average temperature established during the performance test.~~

~~(c) Pursuant to 40CFR Part 63.1183, the Permittee shall:~~

- ~~(1) Following the performance test of the curing oven, measure and record the average operating temperature of the incinerator as specified in 40 CFR Part 63.1185(b).~~
- ~~(2) Operate and maintain the incinerator as specified in the operations, maintenance, and monitoring plan required by 40 CFR Part 63.1187.~~

D.1.22 Incinerator Operating Temperature for the Curing Oven [40CFR Part 63.1183]

(a) Pursuant to 40CFR Part 63.1179, the Permittee shall meet the following operating limits:

Maintain the operating temperature of the incinerator so that the average operating temperature for each three-hour block period never falls below the average temperature established during the performance test.

(b) Pursuant to 40CFR Part 63.1183, the Permittee shall:

- (1) Following the performance test of the curing oven, measure and record the average operating temperature of the incinerator as specified in 40CFR Part 63.1185(b).**
- (2) Operate and maintain the incinerator as specified in the operations, maintenance, and monitoring plan required by 40CFR Part 63.1187.**

41. Condition D.1.16 (Record Keeping Requirements) (b)(1)(B) (now D.1.23) now requires the source to record whether the cleaning cycle operation was normal. Lines (c)(2) - (7) have been deleted.

D.1.16 Record Keeping Requirements

(a) To document compliance with Condition D.1.75, the Permittee shall maintain records in accordance with (1) and (3) below. Records maintained for (1) and (3) shall be taken monthly and shall be complete and sufficient to establish compliance with the usage limits and/or the SO₂ emission limit established in Condition D.1.75.

- (1) The total mineral charge per month,**
- (2) Maximum mineral charge per hour on a monthly basis, and**
- (3) The weight of SO₂ emitted for each compliance period.**

(b) To document compliance with Condition D.1.149, the Permittee shall maintain records of visible emission notations of the two (2) cupolas (EU-P2 and EU-P4), the two (2) blow-chambers (EU-P6 and EU-P8), curing oven #2 (EU-P7), line trimmings/sizing section (EU-P9 and the #2 Line cooling section (EU-P10) stack exhausts once per shift.

(c) To document compliance with Condition D.1.1540, the Permittee shall maintain the following:

- (1) Records once per shift of the following operational parameters during normal operation when venting to the atmosphere:**
 - (A) Inlet and outlet differential static pressure; and**

(B) Cleaning cycle ~~operation: frequency and differential pressure.~~

~~(2) Documentation of all response steps implemented, per event.~~

~~(3) Operation and preventive maintenance logs, including work purchases orders, shall be maintained.~~

~~(4) Quality Assurance/Quality Control (QA/QC) procedures.~~

~~(5) Operator standard operating procedures (SOP).~~

~~(6) Manufacturer's specifications or its equivalent.~~

~~(7) Equipment "troubleshooting" contingency plan.~~

(28) Documentation of the dates vents are redirected.

(d) To document compliance with Condition D.1.1644, the Permittee shall maintain records of the results of the inspections required under Condition D.1.1644 and the dates the vents are redirected.

(e) To document compliance with Condition D.1.1843, the Permittee shall maintain a log of weekly particulate matter observations, daily and monthly inspections, and those additional inspections prescribed by the Preventive Maintenance Plan.

(f) The Permittee shall maintain monthly records of the amount and type of fuel burned in #1 boiler EU-P11 pursuant to 40 CFR 60 Subpart Dc

(g) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

42. Condition D.1.17(a) (now D.1.24) has been separated from Condition D.1.17(b) into a new condition, D.1.25.

D.1.17 Record Keeping Requirements ~~[40CFR Part 63, Subpart DDD]~~ [40CFR Part 63.10(b)]
Pursuant to 40CFR Part 63.10(b)1192, the Permittee shall:

~~(a)~~ Maintain files of all information **for the two (2) cupolas (EU-P2 and EU-P4) and the curing oven (EU-P7)** required by 40CFR Part 63.10(b) of the general provisions in Subpart A of this part, including all notifications and reports.

D.1.25 Record Keeping Requirements [40CFR Part 63.1192]

~~(a)~~ Maintain records of the following information ~~also~~:

(1) Cupola production (melt) rate (tons per hour) of melt.

(2) All bag leak detection system alarms. Include the date and time of the alarm, when corrective actions were initiated, the cause of the alarm, an explanation of the corrective actions taken, and when the cause of the alarm was corrected.

(3) The free-formaldehyde content of each resin lot and the binder formulation, including formaldehyde content, of each binder batch used in the manufacture of bonded products.

- (4) Incinerator operating temperature and results of incinerator inspections. For all periods when the average temperature in any three-hour block period fell below the average temperature established during the performance test, and all periods when the inspection identified incinerator components in need of repair or maintenance, include the date and time of the problem, when corrective actions were initiated, the cause of the problem, an explanation of the corrective actions taken, and when the cause of the problem was corrected.
- (be) Retain each record for at least five (5) years following the date of each occurrence, measurement, corrective action, maintenance, record, or report. The most recent two (2) years of records must be retained at the facility. The remaining three (3) years of records may be retained off site.

The Indiana state rule cited in Section C - General Record Keeping is more stringent and therefore the Permittee shall maintain the most recent three(3) years of records at the source.

~~(d) Retain records on microfilm, on a computer, on computer disks, on magnetic tape disks, or on microfiche.~~

- (ce) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

43. Condition D.1.18 (now D.1.26) (Reporting Requirements) has been revised to require that these reports should be certified by the responsible official. Part 70 requires all reports to be certified. EPA has also requested this change.

D.1.18 Reporting Requirements

- (a) A semi-annual summary of the information to document compliance with the natural gas fired boiler certification, shall be submitted to the address listed in Section C - General Reporting Requirements, using the reporting form located at the end of this permit, or their equivalent, within thirty (30) days after the end of the six (6) month period being reported. **The report submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).**
- (b) Pursuant to 40 CFR Part 63.1193, the Permittee shall prepare and submit reports to the IDEM, OAM as required by this subpart and 40CFR Part 63.10 of the general provisions in Subpart A of this part. **The reports submitted by the Permittee do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).** These reports include, but are not limited to, the following:

44. Condition D.1.27 has been added to specify the notification requirements as follows:

D.1.27 Notification Requirements [40CFR Part 63.1191]

Pursuant to 40CFR Part 63.1191, the Permittee shall submit written notifications to the address listed in Section C - General Reporting Requirements as required by 40CFR 63.9(b - h) of the General Provisions in Subpart A of 40 CFR Part 63.

Forms

45. Emergency/Deviation Occurrence Report Form is now called the Emergency Occurrence Report. All references to deviations have been removed. These forms should be sent to the Compliance Branch, not the Compliance Data Section. IDEM has negotiated with EPA on the reporting of emergencies. They agree to allow the 2 day notification to come in without the responsible official

certification as long as the emergencies are included in the Quarterly Deviation and Compliance Monitoring Report. That report is certified by the responsible official, therefore will comply with the Part 70 requirement to have all reports certified.

46. The monthly and quarterly reports will now need to be certified by the responsible official, therefore the last line in each of these reports have been changed from ~~"A certification is not required for this report."~~ to **"Attach a signed certification to complete this report"**.
47. The Semi-Annual Compliance Monitoring Report, is now called the Quarterly Deviation and Compliance Monitoring Report. The form now requires the source to not only report that there were deviations, but to also include the probable cause and the response steps taken. IDEM is no longer requiring sources to report deviations in ten days, therefore every source will need submit this report quarterly. For sources with an applicable requirement which gives an alternate schedule for reporting deviations, those deviations will not need to be reported quarterly, but instead should be reported according to the schedule in the applicable requirement.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
COMPLIANCE DATA SECTION BRANCH
P.O. Box 6015
100 North Senate Avenue
Indianapolis, Indiana 46206-6015
Phone: 317-233-5674
Fax: 317-233-5967

PART 70 OPERATING PERMIT
EMERGENCY/~~DEVIATION~~ OCCURRENCE REPORT

Source Name: Thermafiber LLC, Wabash Plant
Source Address: 3711 West Mill Street Extended, Wabash, Indiana 46992
Mailing Address: 3711 West Mill Street Extended, Wabash, Indiana 46992
Part 70 Permit No.: T 169-6218-00009

This form consists of 2 pages

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Check either No. 1 or No. 2	
<input checked="" type="checkbox"/> 1.	This is an emergency as defined in 326 IAC 2-7-1(12) <input type="checkbox"/> The Permittee must notify the Office of Air Management (OAM), within four (4) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and <input type="checkbox"/> The Permittee must submit notice in writing by mail or by facsimile within two (2) days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16
<input checked="" type="checkbox"/> 2.	This is a deviation, reportable per 326 IAC 2-7-5(3)(C) <input type="checkbox"/> The Permittee must submit notice in writing within ten (10) calendar days

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:
Control Equipment:
Permit Condition or Operation Limitation in Permit:
Description of the Emergency/ Deviation :
Describe the cause of the Emergency/ Deviation :

If any of the following are not applicable, mark N/A

Page 2 of 2

Date/Time Emergency/ Deviation started:
Date/Time Emergency/ Deviation was corrected:
Was the facility being properly operated at the time of the emergency/ deviation ? Y N Describe:
Type of Pollutants Emitted: TSP, PM-10, SO ₂ , VOC, NO _x , CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency/ deviation :
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by: _____

Title / Position: _____

Date: _____

Phone: _____

A certification is not required for this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
COMPLIANCE DATA SECTION

PART 70 OPERATING PERMIT
QUARTERLY SEMI-ANNUAL DEVIATION and COMPLIANCE MONITORING REPORT

Source Name: Thermafiber LLC, Wabash Plant
Source Address: 3711 West Mill Street Extended, Wabash, Indiana 46992
Mailing Address: 3711 West Mill Street Extended, Wabash, Indiana 46992
Part 70 Permit No.: T 169-6218-00009

Months: _____ to _____ Year: _____

Page 1 of 2

<p>This report is an affirmation that the source has met all the compliance monitoring requirements stated in this permit. This report shall be submitted quarterly semi-annually based on a calendar year. Any deviation from the compliance monitoring requirements, and the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. with the following exceptions: Deviations that are required to be reported by an applicable requirement shall be reported according to the schedule stated in the applicable requirement and do not need to be included in this report. Additional pages may be attached if necessary. This form can be supplemented by attaching the Emergency/Deviation Occurrence Report. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".</p>	
<p><input type="checkbox"/> NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.</p>	
<p><input type="checkbox"/> THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD</p>	
<p>Compliance Monitoring Permit Requirement (specify permit condition #)</p>	
<p>Date of each Deviation:</p>	<p>Duration of Deviation:</p>
<p>Number of Deviations:</p>	
<p>Probable Cause of Deviation:</p>	
<p>Response Steps Taken:</p>	
<p>Compliance Monitoring Permit Requirement (specify permit condition #)</p>	
<p>Date of each Deviation:</p>	<p>Duration of Deviation:</p>
<p>Number of Deviations:</p>	
<p>Probable Cause of Deviation:</p>	
<p>Response Steps Taken:</p>	

Compliance Monitoring Permit Requirement (specify permit condition #)	
Date of each Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Compliance Monitoring Permit Requirement (specify permit condition #)	
Date of each Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Compliance Monitoring Permit Requirement (specify permit condition #)	
Date of each Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Form Completed By: _____

Title/Position: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

Indiana Department of Environmental Management Office of Air Management

Technical Support Document (TSD) for a Part 70 Operating Permit

Source Background and Description

Source Name: Thermafiber LLC, Wabash Plant
Source Location: 3711 West Mill Street Extended, Wabash, Indiana 46992
County: Wabash
SIC Code: 3296
Operation Permit No.: T 169-6218-00009
Permit Reviewer: Mark L. Kramer

The Office of Air Management (OAM) has reviewed a Part 70 permit application from Thermafiber LLC, Wabash Plant relating to the operation of a mineral wool manufacturing source.

Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units and pollution control devices:

- (a) One (1) coke-fueled cupola #2, known as EU-P2, installed in 1955, and refurbished in 1995, natural gas supplemented, equipped with a drop-out box, multiclone in series and a side stream baghouse, exhausting through Stack S1, installed in 1995, capacity: 7.0 tons of minerals per hour.
- (b) One (1) coke-fueled cupola #4, known as EU-P4, installed in 1955, and refurbished in 1994, natural gas supplemented, equipped with a drop-out box, multiclone in series and a side stream baghouse, exhausting through Stack S3, installed in 1995, capacity: 8.0 tons of minerals per hour.
- (c) One (1) blowchamber #4, known as EU-P6, installed in 1955, equipped with a dry media filter, exhausting through Stack S4, installed in 1992, capacity: 8.0 tons of fiberized minerals and 0.1 tons of dedusting annealing oil per hour.
- (d) One (1) natural gas-fired curing oven #2, known as EU-P7, rated at 5.7 million British thermal units per hour, exhausting through Stack S5, installed in 1955, and replaced 1978, capacity: 7.0 tons of fiberized minerals per hour.
- (e) One (1) blowchamber #2, known as EU-P8, equipped a dry media filter, exhausting through Stack S6, installed in 1955, replaced in 1978 and refurbished in 1999, capacity: 7.0 tons of fiberized minerals and 1.4 tons of binder and water per hour.
- (f) One (1) #2 line trimming/sizing section, known as EU-P9, equipped with a baghouse, known as CE7, exhausting through Stack S7, installed in 1955, and replaced in 1978, capacity: 5.8 tons of fiberized minerals per hour.

- (g) Two (2) storage tanks, known as Tanks 4 and 5, capacity: 4,000 gallons of resin, each.
- (h) Two (2) storage tanks, known as Tanks 6 and 7, capacity: 5,000 gallons of reax, each.
- (i) One (1) storage tank, known as Tank 8, installed prior to 1960, capacity: 3,700 gallons of binder.
- (j) One (1) binder mix tank, known as Tank 9, installed prior to 1960, capacity: 500 gallons of process fluids.

Unpermitted Emission Units and Pollution Control Equipment

The source also consists of the following unpermitted facilities/units:

- (k) One (1) #2 line cooling section, known as EU-P10, exhausting through Stack S8, installed in 1955, and replaced in 1978, capacity: 7.0 tons of fiberized minerals per hour.
- (l) One (1) natural gas-fired #1 boiler, known as EU-P11, rated at 12.5 million British thermal units per hour, exhausting through Stack S9, installed in January 31, 1990.

Note: The #2 line cooling section, EU-P10, should have been permitted in 1978 when it was replaced.

New Emission Units and Pollution Control Equipment Receiving Prior Approval

There are no new facilities proposed at this source during this review process.

Insignificant Activities

- (a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) British thermal units per hour. (One (1) natural gas-fired boiler, known as boiler #2, rated at 4.5 million British thermal units per hour, exhausting through Stack 10, installed in 1977. (326 IAC 6-2))
- (b) Equipment powered by internal combustion engines of capacity equal to or less than 500,000 British thermal units per hour, except where total capacity of equipment operated by one stationary source exceeds 2,000,000 British thermal units per hour.
- (c) Combustion source flame safety purging on startup.
- (d) A gasoline fuel transfer and dispensing operation handling less than or equal to 1,300 gallons per day, such as filling of tanks, locomotives, automobiles, having a storage capacity less than or equal to 10,500 gallons. (One (1) storage tank, known as Tank 10 (unpermitted), installed in 1989, capacity: 500 gallons of gasoline.)
- (e) A petroleum fuel, other than gasoline, dispensing facility, having a storage capacity of less than or equal to 10,500 gallons, and dispensing less than or equal to 230,000 gallons per month. (One (1) storage tank, known as Tank 1 (unpermitted), installed in 1979, capacity: 1,000 gallons of diesel fuel.)
- (f) The following VOC and HAP storage containers: Two (2) storage tanks, known as Tanks 2 and 3, capacity: 10,000 gallons of annealing oil and 8,000 gallons of mulrex, respectively.
 - (1) Storage tanks with capacity less than or equal to 1,000 gallons and annual throughputs less than 12,000 gallons.

- (2) Vessels storing lubricating oil, hydraulic oils, machining oils, and machining fluids.
- (g) Application of oils, greases lubricants or other nonvolatile materials applied as temporary protective coatings.
- (h) Machining where an aqueous cutting coolant continuously floods the machining interface.
- (i) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6.
- (j) Cleaners and solvents characterized as follows:
 - (1) having a vapor pressure equal to or less than 2 kiloPascals; 15 millimeters of mercury; or 0.3 pounds per square inch measured at 38EC (100EF) or;
 - (2) having a vapor pressure equal to or less than 0.7 kiloPascals; 5 millimeters of mercury; or 0.1 pounds per square inch measured at 20EC (68EF); the use of which for all cleaners and solvents combined does not exceed 145 gallons per 12 months.
- (k) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment.
- (l) Closed loop heating and cooling systems.
- (m) Solvent recycling systems with batch capacity less than or equal to 100 gallons.
- (n) Noncontact cooling tower systems with either of the following: forced and induced draft cooling tower system not regulated under a NESHAP.
- (o) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.
- (p) Paved and unpaved roads and parking lots with public access.
- (q) Conveyors as follows: covered conveyors for coal or coke conveying of less than or equal to 360 tons per day.
- (r) Asbestos abatement projects regulated by 326 IAC 14-10.
- (s) Purging of gas lines and vessels that is related to routine maintenance and repair of buildings, structures, or vehicles at the source where air emissions from those activities would not be associated with any production process.
- (t) Blowdown for any of the following: sight glass; boiler; compressors; pumps; and cooling tower.
- (u) On-site fire and emergency response training approved by the department.
- (v) Other emergency equipment as follows: stationary fire pumps.
- (w) Other activities or categories not previously identified: sand silo vent; cement silo vent; kiln cooling exhaust stack

Existing Approvals

The source has been operating under previous approvals including, but not limited to, the following: list permits, registrations, modifications, exemptions. Existing permits were transferred from USG Interiors to Thermafiber, LLC by A-169-5799-00009 issued on August 15, 1996. This amendment covered all existing permits issued through August 16, 1991.

- (a) OP 85-01-81-0079, issued October 22, 1976,
- (b) OP 85-01-85-0123, issued August 1, 1981,
- (c) OP 85-01-85-0124, issued August 1, 1981,
- (d) OP 85-01-85-0125, issued August 1, 1981,
- (e) OP 85-01-89-0154, issued February 13, 1985,
- (f) OP 85-01-89-0155, issued February 13, 1985,
- (g) OP 85-01-89-0156, issued February 13, 1985,
- (h) CP 169-2049-00009, issued August 16, 1991,
- (i) CP 169-4790-00009, issued September 18, 1995,
- (j) A 169-5799-00009, issued August 15, 1996,
- (k) CP 169-7387, issued February 18, 1997,
- (l) CP 169-8487, issued June 5, 1997, and
- (m) A 169-8690, issued July 3, 1997.

All conditions from previous approvals were incorporated into this Part 70 permit.

Enforcement Issue

- (a) IDEM is aware that equipment has been constructed and operated prior to receipt of the proper permit. The subject equipment is listed in this Technical Support Document under the condition entitled *Unpermitted Emission Units and Pollution Control Equipment Requiring ENSR*. Note that the #2 line cooling section, EU-P10, should have been permitted in 1978 when it was replaced.
- (b) IDEM is reviewing this matter and will take appropriate action. This proposed permit is intended to satisfy the requirements of the construction permit rules.

Recommendation

The staff recommends to the Commissioner that the Part 70 permit be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An administratively complete Part 70 permit application for the purposes of this review was received on July 2, 1996. Additional information was received on October 9, 1996, July 29, 1998, April 21, August 6, 25 and 26, 1999, May 1 and 18, 2000, and June 27, 2000.

A notice of completeness letter was mailed to the source on June 23, 1997.

Emission Calculations

See pages of 1 through 6 of 6 of Appendix A of this document for detailed emissions calculations.

Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA."

This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	Potential Emissions (tons/year)
PM	1,440
PM ₁₀	774
SO ₂	649
VOC	383
CO	18,969
NO _x	143

Note: For the purpose of determining Title V applicability for particulates, PM₁₀, not PM, is the regulated pollutant in consideration.

HAPs	Potential Emissions (tons/year)
Lead Compounds	0.074
Manganese Compounds	4.37
Chromium Compounds	0.093
Nickel Compounds	0.267
Carbonyl Sulfide	197
Arsenic Compounds	0.048
Barium Compounds	0.574
Beryllium Compounds	0.007
Cadmium Compounds	0.119

HAPs	Potential Emissions (tons/year)
Antimony Compounds	0.917
Selenium Compounds	0.131
Mineral Fibers	0.621
TOTAL	205

- (a) The potential emissions (as defined in 326 IAC 1-2-55) of PM₁₀, SO₂, CO, NO_x and VOC are equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (b) The potential emissions (as defined in 326 IAC 1-2-55) of any single HAP is equal to or greater than ten (10) tons per year and the potential emissions (as defined in 326 IAC 1-2-55) of a combination HAPs is greater than or equal to twenty-five (25) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (c) Fugitive Emissions

Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

- (d) Potential To Emit of CWOP/OWOP Equipment

The following table reflects the PTE before controls for the unpermitted equipment, EU-P10 and EU-P11.

	Potential to Emit (tons/year)						
Process/facility	PM	PM ₁₀	SO ₂	VOC	CO	NO _x	HAPs
Cooling (EU-P10) (1978)	61.3	58.3	0.000	1.23	0.000	0.000	0.000
Boiler #1 (EU-P11) (1990)	0.102	0.408	0.032	0.295	4.51	5.37	0.000

The replacement of the cooling line in 1978 had a PTE of PM greater than twenty-five (25) tons per year, whereas the installation of the boiler had a PTE of NO_x in excess of twenty-five (25) pounds per day, but less than twenty-five (25) tons per year. Pursuant to 326 IAC 2-1-1 prior to 1998, a construction permit was required for the cooling line, whereas a registration was required for the boiler.

Actual Emissions

The following table shows the actual emissions from the source. This information reflects the 1996 OAM emission data and HAPs from Form GSD-08 of the application.

Pollutant	Actual Emissions (tons/year)
PM	612
PM ₁₀	551
SO ₂	116
VOC	46.4
CO	4.16
NO _x	175
Carbonyl Sulfide	92.1
Arsenic Compounds	0.010
Barium Compounds	0.114
Beryllium Compounds	0.001
Cadmium Compounds	0.016
Chromium Compounds	0.078
Mercury Compounds	negligible
Nickel Compounds	0.864
Lead Compounds	0.053
Antimony Compounds	0.014
Selenium Compounds	0.207
Fine Mineral Fibers	0.217

Potential to Emit After Issuance

The table below summarizes the potential to emit, reflecting all limits, of the significant emission units after controls. The control equipment is considered federally enforceable only after issuance of this Part 70 Operating Permit.

	Limited Potential to Emit (tons/year)						
Process/facility	PM	PM ₁₀	SO ₂	VOC	CO	NO _x	HAPs
Cupola (EU-P2)	61.1	29.3	283	0.189	8,847	56.6	92.3
Cupola (EU-P4)	55.0	28.6	324	0.216	10,109	64.7	105
Blowchamber #4 (EU-P6)	58.0	41.3	3.05	29.0	0.000	0.000	0.285
Curing Oven (EU-P7)	12.0	11.3	36.8	30.7	0.000	4.91	0.000

	Limited Potential to Emit (tons/year)						
Process/facility	PM	PM ₁₀	SO ₂	VOC	CO	NO _x	HAPs
Blowchamber #2 (EU-P8)	25.8	25.3	2.67	27.6	0.000	0.000	0.336
Trimming/Sizing Sections (EU-P9)	15.2	15.2	0.000	0.000	0.000	0.000	0.000
Cooling (EU-P10)	61.3	58.3	0.000	1.23	0.000	0.000	0.000
Boiler #1 (EU-P11)	0.102	0.408	0.032	0.295	4.51	5.37	0.000
Fugitives	15.3	9.63	0.000	0.000	0.000	0.000	0.000
Insignificant Activities	5	5	3	5	3	11.6	2
Total Emissions	309	225	652	94.8	18,972	143.1	200

County Attainment Status

The source is located in Wabash County.

Pollutant	Status
PM ₁₀	attainment
SO ₂	attainment
NO ₂	attainment
Ozone	attainment
CO	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) and oxides of nitrogen (NO_x) are precursors for the formation of ozone. Therefore, VOC and NO_x emissions are considered when evaluating the rule applicability relating to the ozone standards. Wabash County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NO_x emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (b) Wabash County has been classified attainment or unclassifiable for all remaining criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (c) Fugitive Emissions

Since this type of operation is not one of the 28 listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive emissions are not counted toward determination of PSD and Emission Offset applicability.

Part 70 Permit Conditions

This source is subject to the requirements of 326 IAC 2-7, pursuant to which the source has to meet the following:

- (a) Emission limitations and standards, including those operational requirements and limitations that assure compliance with all applicable requirements at the time of issuance of Part 70 permits.
- (b) Monitoring and related record keeping requirements which assume that all reasonable information is provided to evaluate continuous compliance with the applicable requirements.

Federal Rule Applicability

- (a) The 12.5 million British thermal units per hour rated boiler, EU-P11, constructed in 1990 is subject to the New Source Performance Standard (NSPS), 326 IAC 12, (40 CFR 60.40, Subpart Dc - Standards of Performance for Small Industrial - Commercial - Institutional Steam Generating Units) since the boiler was constructed after June 9, 1989 and is rated between 10 and 100 million British thermal units per hour. The amount and type of fuel combusted each day must be recorded.
- (b) The insignificant 4.5 million British thermal units per hour rated boiler, is not subject to the New Source Performance Standard (NSPS), 326 IAC 12, (40 CFR 60.40, Subpart Dc - Standards of Performance for Small Industrial - Commercial - Institutional Steam Generating Units) since the boiler is rated less 10 million British thermal units per hour.
- (c) This mineral wool manufacturing source is not subject to the requirements of the New Source Performance Standard (NSPS), 326 IAC 12, (40 CFR 60.680, Subpart PPP), since this source does not meet the definition of a wool fiberglass insulation manufacturing line. Specifically, this source does not produce insulation material composed of glass fibers made from glass produced or melted at the source.
- (d) This source is subject to the National Emission Standards for Hazardous Air Pollutants, 326 IAC 14, (40 CFR 60.1175, Subpart DDD, Mineral Wool Production). Pursuant to 40 CFR 63.1180, the existing two (2) mineral wool cupolas, known as EU-P2 and EU-P4, and one (1) curing oven, known as EU-P7 operations are subject to 40 CFR 63, Subpart DDD, with a compliance date of:
 - (1) June 2, 2002; or
 - (2) June 3, 2003 provided that the Permittee applies for and receives a one (1)-year extension under Section 112(i)(3)(B) of the Act.

Attached is a copy of the federal rule.

The provisions of 40 CFR 63 Subpart A - General Provisions, which are incorporated as 326 IAC 20-1-1, apply to the facility described in this section except when otherwise specified in 40 CFR 63 Subpart DDD.

Pursuant to 40 CFR 63, Subpart DDD, the two (2) existing cupolas and one (1) curing oven are subject to the following conditions at all times, except during periods of startup, shut-down, or malfunction:

- (1) The particulate matter (PM) emissions from cupola #2 and cupola #4, known as EU-P2 and EU-P4, shall not exceed 0.10 pound of PM per ton of melt.
- (2) Pursuant to 40CFR Part 63.1178 for each cupola:
 - (A) Begin within one hour after the alarm on a bag leak detection system sounds, and complete in a timely manner, corrective actions as specified in by the operations, maintenance, and monitoring plan required by 40CFR 63.1187, and
 - (B) When the alarm on a bag leak detection system sounds for more than five (5%) percent of the total operating time in a six (6)-month reporting period, the Permittee shall develop and implement a written quality improvement plan (QIP) consistent with the compliance assurance monitoring requirements of 40CFR 64.8(b)–(d).
 - (C) Or the Permittee shall maintain the operating temperature of the incinerator so that the average operating temperature for each three-hour block period never falls below the average temperature established during the performance test.
- (3) The formaldehyde emissions from curing oven #2, known as EU-P7, shall meet either of the following:
 - (A) 0.06 pound of formaldehyde per ton of melt, or
 - (B) Shall be reduced by at least eighty (80%) percent from the uncontrolled formaldehyde emissions.
- (4) The Permittee shall maintain the free-formaldehyde content of each resin lot and the formaldehyde content of each binder formulation at or below the specification ranges established during the performance test.
- (5) The Permittee shall maintain the operating temperature of the incinerator so that the average operating temperature for each three-hour block period never falls below the average temperature established during the performance test.
- (6) The mineral wool operations shall be subject to the record keeping and reporting requirement as indicated in the mineral wool NESHAP, Subpart DDD.
- (e) The existing two (2) cupolas, known as EU-P2 and EU-P4, are not subject the carbon monoxide (CO) emission limits of 40 CFR 60.1178, Subpart DDD because the two (2) cupolas are not new or are not being reconstructed.
- (f) The two (2) storage tanks, known as Tanks 4 and 5 with a capacity of 4,000 gallons of resin, each, the two (2) storage tanks, known as Tanks 6 and 7 with a capacity of 5,000 gallons of reax, each and the one (1) storage tank, known as Tank 8, installed prior to 1960 with a capacity of 3,700 gallons of binder are not subject to the requirements of the New Source Performance Standard, 326 IAC 12, (40 CFR 60.110, 110a and 110b) Subpart K, Ka or Kb because their capacities are all less than 40 cubic meters (10,567 gallons) each.

State Rule Applicability - Entire Source

326 IAC 2-2 (Prevention of Significant Deterioration (PSD))

Prior to May 1, 1996, this facility was known as USG Interiors and was owned by USG Corporation. USG Corporation purchased the Wabash facility from American Rock Wool in 1959. USG Corporation sold all interests in the facility to an investment company called Laurel Mountain Partners on May 1, 1996, at which time the name was changed from USG Interiors to Thermafiber. As a condition of the sale of Thermafiber, USG Corporation was responsible for compliance of particulate emissions from Cupolas #2 (EU-P2) and #4 (EU-P4). This required installation of new Multiclone dust collectors and Side Stream Fabric Filter Duct Collector Systems for the control of particulate emissions from Cupolas Nos. 2 and 4. Compliance was confirmed on July 22, 1997. Also, as a condition of sale, stack testing for #2 Blowchamber (EU-P8) and #4 Blowchamber (EU-P6) was performed on November 5, 1995 to exhibit compliance on particulate emissions.

While under the Thermafiber name, only one refurbishment has been made. A refurbishment was made to the #2 blowchamber (EU-P8) in 1999. This refurbishment was to improve product quality only. No increase in cupola capacity, no new emission sources, no new emitted materials, and no increase to existing emissions were expected or experienced. All emission controls remain the same.

Refurbishment is also performed on equipment for maintenance reasons. Refurbishment, again, results in no increase in capacity, no new emission sources, no new emitted materials, and no increase to existing emissions. The cupolas at the Wabash facility are water-cooled. Heat stress fractures, thermal shock, and abrasion can significantly reduce water-jacket life. If welding and patching can no longer keep the water-cooled jacket serviceable and this downtime increases the cost to the business, the shell liner is then refurbished.

The source was already PSD major before these replacements and refurbishment were performed. The following emission units have been refurbished between 1994 and 1999: EU-P2, EU-P4 and EU-P8. The following emissions units were replaced in 1978: EU-P7, EU-P8, EU-P9 and EU-P10.

PTE is for each emission unit (based on 8,760 hours of operation per year at rated capacity including enforceable emission control and production limit, where applicable). The contemporaneous decreases are the average actual emissions for 1997 and 1998, the last two (2) available years, for EU-P7, EU-P8, EU-P9 and EU-P10.

Pollutant	PM (tons/yr)	PM ₁₀ (tons/yr)	SO ₂ (tons/yr)	VOC (tons/yr)	CO (tons/yr)	NO _x (tons/yr)
Replacement (EU-P8)	25.8	25.3	2.67	27.6	0.00	0.00
(EU-P7)	12.0	11.3	36.8	30.7	0.00	4.91
(EU-P9)	15.2	15.2	0.00	0.00	0.00	0.00
(EU-P10)	61.3	58.3	0.00	1.23	0.00	0.00
Subtotal	114.3	110.1	39.5	59.5	0.00	4.91
Contemporaneous Increases	0.00	0.00	0.00	0.00	0.00	0.00
Contemporaneous Decreases						
(EU-P8)	22.9	22.5	0.000	17.9	0.000	0.00
(EU-P7)	79.7	75.7	0.009	20.0	0.305	4.71
(EU-P9)	0.00	0.00	0.000	0.00	0.000	0.00
(EU-P10)	39.8	37.9	0.000	0.796	0.000	0.00
Subtotal	142.4	136.1	0.009	38.7	0.305	4.71

Pollutant	PM (tons/yr)	PM ₁₀ (tons/yr)	SO ₂ (tons/yr)	VOC (tons/yr)	CO (tons/yr)	NO _x (tons/yr)
Net Emissions	-28.1	-26.0	39.5	20.8	-0.305	0.200
PSD Significant Level	25	15	40	40	100	40

The net emissions for these emission units are all less than the PSD significant levels. Therefore, the replacement of these emission units in 1978 was a minor modification to a major PSD source that was not required to undergo PSD review on August 7, 1977. In order to assure that the modification remains minor, a condition of the proposed permit requires that EU-P7 not exceed 36.8 tons of SO₂ per year in order that 326 IAC 2-2 remains not applicable. The reason for the extremely low actual SO₂ emissions for EU-P7 reported is unknown, but may reflect calculating the SO₂ emission rate from natural gas emission factors from Chapter 1 of AP-42 rather than those associated with the curing oven in AP-42.

The potential emissions from the boiler #1 (EU-P11), installed in 1990, are also less than the PSD significant levels for all pollutants as shown in the Limited Potential to Emit table of this document.

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting), because it has the potential to emit more than one hundred (100) tons per year of VOC, SO₂, PM₁₀ and CO. Pursuant to this rule, the owner/operator of the source must annually submit an emission statement for the source. The annual statement must be received by July 1 of each year and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8) (Emission Statement Operating Year).

326 IAC 5-1 (Opacity Emissions Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary alternative opacity limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

State Rule Applicability - Individual Facilities

326 IAC 2-7-5(13) (Preventive Maintenance Plan)

- (a) A Preventive Maintenance Plan is required for EU-P2, EU-P4, EU-P6, and EU-P8 because the allowable PM emissions exceed ten (10) pounds per hour and each emission unit has a control device.
- (b) A Preventive Maintenance Plan is required for EU-P2, EU-P4, EU-P7 because the two (2) existing cupolas and the one (1) existing curing oven are subject to the NESHAP, Subpart DDD.
- (c) A Preventive Maintenance Plan is required for EU-P10 because the actual PM emissions are

projected to exceed twenty five (25) tons per year without a control device.

- (d) A Preventive Maintenance Plan is required for EU-P11 because the 12.5 million British thermal units per hour rated boiler constructed in 1990 is subject to the New Source Performance Standard (NSPS), 326 IAC 12, (40 CFR 60.40, Subpart Dc - Standards of Performance for Small Industrial - Commercial - Institutional Steam Generating Units).
- (e) A Preventive Maintenance Plan is not required for EU-P9 because:
 - (1) There is no NSPS or NESHAP that applies,
 - (2) There are no control devices
 - (3) No individual facilities are projected to have an actual VOC and PM emission rate of twenty-five (25) tons per year or greater, and
 - (4) There are no conditions limiting the potential-to-emit to avoid the applicability of any requirements.

326 IAC 2-7-6(1),(6) (Testing Requirements)

- (a) During the period between 30 and 36 months after issuance of this permit, the Permittee shall perform PM testing of the two (2) cupolas (EU-P2 and EU-P4) utilizing Methods 5 or 17 (40 CFR 60, Appendix A) or other methods as approved by the Commissioner. These tests shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. The Permittee is not required to test the remaining facilities, however, IDEM may require compliance testing at any specific time when necessary to determine if these facilities are in compliance.
- (b) The Permittee shall conduct a PM performance test of each cupola as specified in 40 CFR 63.1188 utilizing Method 5 (40 CFR Part 60, Appendix A) or other methods as approved by the Commissioner to show compliance with the PM emission limits while the bag leak detection system is installed, operational, and properly adjusted.
- (c) The Permittee shall conduct a formaldehyde performance test of the curing oven as specified in 40 CFR Part 63.1188 utilizing Method 318 (40CFR Part 60, Appendix A), or other methods as approved by the Commissioner, while manufacturing the product that requires a binder formulation made with the resin containing the highest free-formaldehyde content specification range. The Permittee shall show compliance with the formaldehyde emission limits while the device for measuring incinerator operating temperature is installed, operational, and properly calibrated. The Permittee shall establish the average operating temperature as specified in 40CFR Part 63.1185(a).

326 IAC 6-2 (Particulate emission limitations for sources of indirect heating)

The 12.5 million British thermal units per hour rated natural gas boiler, EU-P11, constructed in 1990 is subject 326 IAC 6-2 (Particulate Emissions Limitations for Sources of Indirect Heating). Pursuant to 326 IAC 6-2-4, the particulate matter (PM) emissions shall be limited to:

$$Pt = 1.09/Q^{0.26}$$

where, Q = the total source maximum operating capacity in million British thermal units per hour

$$Pt = 1.09/(12.5 + 4.5 \text{ mmBtu/hr})^{0.26} = 0.522 \text{ pounds per million British thermal units}$$

Allowable PM emissions = $(0.522 \text{ lbs/mmBTU}) \times (12.5 \text{ mmBTU/hr}) \times (8760 \text{ hr/yr}) \times (1 \text{ ton}/2000 \text{ lbs}) = 28.6$ tons per year. The potential PM emissions from this boiler are 0.102 tons per year.

Based on this calculation, the potential PM emissions are less than the allowable emissions, therefore, this boiler also complies with the rule.

326 IAC 6-3-2 (Process Operations)

The following equation was used to determine the allowable emissions, shown in the following table.

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

Process	Process Weight (tons per hour)	Allowable PM Emission Rate (pounds per hour)	Actual PM Emission Rate (pounds per hour)
Cupola #2 (EU-P2)	7.0	15.1	14.0
Cupola #4 (EU-P4)	8.0	16.5	12.6
Blowchamber #4 (EU-P6)	8.1	16.7	13.2
Curing oven #2 (EU-P7)	7.0	15.1	2.73
Blowchamber #2 (EU-P8)	8.4	17.1	5.90
Line trimming/sizing section #2 (EU-P9)	5.8	13.3	3.47
#2 Line cooling section (EU-P10)	7.0	15.1	14.0

The particulate matter control equipment shall be in operation at all times these facilities are in operation, in order to comply with these limits.

326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations)

EU-P2 and EU-P4 emit SO₂ at a rate that exceeds twenty-five (25) tons per year, however, 326 IAC 7-1.1-2 refers to the limit for coal, but since coke is a residual of coal left after destructive distillation, the rule does not apply to coke. Therefore, the sulfur dioxide (SO₂) emissions from the two (2) cupolas due to combustion of coke and natural gas, known as EU-P2 and EU-P4, are exempt from this rule.

326 IAC 8-9 (Volatile Organic Liquid Storage Vessels)

This rule does not apply to the any storage tanks at Thermafiber in Wabash County since it is not located in Lake, Porter, Clark or Floyd Counties.

326 IAC 11-4 (Fiberglass Insulation Manufacturing)

This rule does not apply to this Wabash County source since it is not located in Shelby County.

State Rules Insignificant Activities

- (a) The degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6 are not subject to 326 IAC 8-3-2 and/or 326 IAC 8-3-5 because the degreasing activities at the source do not meet the cold cleaner definition pursuant 326 IAC 1-2-18.5.
- (b) This stationary source also includes the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):
 - (1) One (1) natural gas-fired boiler, known as boiler #2, rated at 4.5 million British thermal units per hour, exhausting through Stack 10, installed in 1977. (326 IAC 6-2)
 - (2) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment. (326 IAC 6-3)
 - (3) Conveyors as follows: covered conveyors for coal or coke conveying of less than or equal to 360 tons per day. (326 IAC 6-3)
 - (4) Other activities or categories not previously identified (326 IAC 6-3): sand silo vent; cement silo vent; kiln cooling exhaust stack

326 IAC 6-2 (Particulate emission limitations for sources of indirect heating)

The 4.5 million British thermal units per hour rated natural gas-fired boiler (insignificant activity), constructed in 1977 is subject to 326 IAC 6-2-3 (Emission limitations for facilities specified in 326 IAC 6-2-1(b)) since it was constructed prior to September 21, 1983 and thus shall be limited by the following equation:

$$Pt = \frac{C * a * h}{76.5 * Q^{0.75} * N^{0.25}} \quad Pt = \text{lbs of PM emitted per mmBtu heat input}$$

C = maximum ground level concentration (default = 50 u/m³)

a = plume rise factor (default = 0.67 for Q less than 1,000 mmBtu/hr)

h = stack height in feet

Q = total source maximum operating capacity (4.5mmBtu/hr)

N = number of stacks in fuel burning operation

$$Pt = \frac{50 \text{ u/m}^3 * 0.67 * 35}{76.5 * 4.5^{0.75} * 1^{0.25}} = 4.96 \text{ pounds of particulate matter emitted per mmBtu heat input}$$

Pursuant to 326 IAC 6-2-3 (e), particulate emissions from all facilities used for indirect heating purposes which began operations after June 8, 1972, shall in no case exceed 0.6 pounds of particulate matter per million British thermal units heat input.

As shown in the spreadsheet for the insignificant boiler #2 combustion, the PM emissions from the boiler are 0.037 tons per year for the 4.5 million British thermal units per hour boiler. This is equivalent to 0.008 pounds per hour of particulate matter per 4.5 million British thermal units heat input or 0.002 pounds per million British thermal unit. Therefore, the boiler complies with the 0.6 pounds of particulate matter per million British thermal units heat input limit.

326 IAC 6-3-2 (Process Operations)

The allowable PM emission rate from the brazing equipment, cutting torches, soldering equipment, and/or welding equipment as well as from the covered conveyors for coal or coke conveying, the sand and cement silo vents and the kiln cooling exhaust stack shall not exceed allowable PM emission rate

based on the following equation:

Interpolation and extrapolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

Compliance Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAM, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The compliance monitoring requirements applicable to this source are as follows:

- (a) The two (2) cupolas (EU-P2 and EU-P4), the two (2) blowchambers (EU-P6 and EU-P8) and the line trimming/sizing section (EU-P9) have applicable compliance monitoring conditions as specified below:
 - (1) Visible emissions notations of the cupola Stack S1 and S3, blowchamber Stack S4 and S6 and line trimming/sizing section Stack 7 exhausts shall be performed once per shift during normal daylight operations. A trained employee will record whether emissions are normal or abnormal. For processes operated continuously "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.
 - (2) The Permittee shall record the total static pressure drop across the multiclone and side stream baghouse controlling each of the two (2) cupolas (EU-P2 and EU-P4), at least once per shift when the cupolas are in operation. Unless operated under conditions for which the Preventive Maintenance Plan specifies otherwise, the pressure drop across the multiclone and baghouse shall be maintained within the range of 3.0 to 7.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contin-

gency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.

- (3) The Permittee shall record the total static pressure drop across the baghouse controlling the trimming/sizing section (EU-P9), at least once per shift when the trimming/sizing section processes are in operation. Unless operated under conditions for which the Preventive Maintenance Plan specifies otherwise, the pressure drop across the baghouse shall be maintained within the range of 4.0 to 8.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.
- (4) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters for each blowchamber (EU-P6 and EU-P8). To monitor the performance of the dry filters, weekly observations shall be made of the particulate matter from the blowchamber stacks S4 and S6 while one or more of the blowchambers are in operation.
- (5) An inspection shall be performed each calendar quarter of all bags controlling the cupolas and the trimming/sizing section when venting to the atmosphere.
- (6) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters for each blowchamber (EU-P6 and EU-P8). To monitor the performance of the dry filters, weekly observations shall be made of the particulate matter from the blowchamber stacks S4 and S6 while one or more of the blowchambers are in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step.

These monitoring conditions are necessary because control devices must operate properly to ensure compliance with 326 IAC 6-3 (Process Operations), 326 IAC 5-1 and 326 IAC 2-7 (Part 70).

- (b) The #2 line cooling section (EU-P10) have applicable compliance monitoring conditions as specified below:

Visible emissions notations of the #2 line cooling section Stack S8 exhaust shall be performed once per shift during normal daylight operations. A trained employee will record whether emissions are normal or abnormal. For processes operated continuously "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

These monitoring conditions are necessary to ensure compliance with 326 IAC 5-1 and 326 IAC 2-7 (Part 70).

- (c) The compliance monitoring requirements of the NESHAP Subpart DDD applicable to each of the two (2) cupolas are as follows:

- (1) Begin within one hour after the alarm on a bag leak detection system sounds, and complete in a timely manner, corrective actions as specified in by the operations, maintenance, and monitoring plan required by 40CFR 63.1187.
- (2) When the alarm on a bag leak detection system sounds for more than five (5%) percent of the total operating time in a six (6)-month reporting period, the Permittee shall develop and implement a written quality improvement plan (QIP) consistent with the compliance assurance monitoring requirements of 40CFR 64.8(b)–(d).
- (3) Or the Permittee shall maintain the operating temperature of the incinerator so that the average operating temperature for each three-hour block period never falls below the average temperature established during the performance test.
- (4) Install, adjust, maintain, and continuously operate a bag leak detection system for each fabric filter.
- (5) Begin corrective actions specified in the operations, maintenance, and monitoring plan required by 40CFR Part 63.1187 within one (1) hour after the alarm on a bag leak detection system sounds. Complete the corrective actions in a timely manner.
- (6) Develop and implement a written QIP consistent with compliance assurance monitoring requirements of 40 CFR Part 64.8(b) through (d) when the alarm on a bag leak detection system sounds for more than five (5%) percent of the total operating time in a six (6)-month reporting period.
- (7) The bag leak detection system must be certified by the manufacturer to be capable of detecting PM emissions at concentrations of ten (10) milligrams per actual cubic meter (0.0044 grains per actual cubic foot) or less.
- (8) The sensor on the bag leak detection system must provide output of relative PM emissions.
- (9) The bag leak detection system must have an alarm that will sound automatically when it detects an increase in relative PM emissions greater than a preset level.
- (10) The alarm must be located in an area where appropriate plant personnel will be able to hear it.
- (11) For a positive-pressure fabric filter, each compartment or cell must have a bag leak detector. For a negative-pressure or induced-air fabric filter, the bag leak detector must be installed downstream of the fabric filter. If multiple bag leak detectors are required (for either type of fabric filter), detectors may share the system instrumentation and alarm.
- (12) Each triboelectric bag leak detection system must be installed, operated, adjusted, and maintained so that it follows EPA's "Fabric Filter Bag Leak Detection Guidance" (EPA-454/R-98-015, September 1997). Other bag leak detection systems must be installed, operated, adjusted, and maintained so that they follow the manufacturer's written specifications and recommendations.
- (13) At a minimum, initial adjustment of the system must consist of establishing the baseline output in both of the following ways:
 - (A) Adjust the range and the averaging period of the device.

(B) Establish the alarm set points and the alarm delay time.

- (14) After initial adjustment, the range, averaging period, alarm set points, or alarm delay time may not be adjusted except as specified in the operations, maintenance, and monitoring plan required by 40CFR Part 63.1187. In no event may the range be increased by more than one hundred (100%) percent or decreased by more than fifty (50%) percent over a 365-day period unless a responsible official as defined in 40CFR Part 63.2 of the general provisions in Subpart A of this part certifies in writing to the IDEM, OAM that the fabric filter has been inspected and found to be in good operating condition.
- (15) Pursuant to 40CFR Part 63.1185(b), to comply with the requirements for maintaining the operating temperature of an incinerator after the performance test, the Permittee shall measure and record the average operating temperature of the incinerator as required by 40 CFR Parts 63.1182 and 63.1183 of this subpart. This average operating temperature of the incinerator is based on the arithmetic average of the one-hour average temperatures for each consecutive three-hour period and is determined in the same manner described in paragraphs (a)(1) through (a)(4) of 40CFR Part 63.1185.

These monitoring conditions are necessary to ensure compliance with 40 CFR 63, Subpart DDD.

- (d) The compliance monitoring requirements of the NESHAP Subpart DDD applicable to the one (1) curing oven are as follows:
 - (1) The Permittee shall maintain the free-formaldehyde content of each resin lot and the formaldehyde content of each binder formulation at or below the specification ranges of the resin and binder used during the performance test.
 - (2) Or the Permittee shall maintain the operating temperature of the incinerator so that the average operating temperature for each three-hour block period never falls below the average temperature established during the performance test.
 - (3) Install, calibrate, maintain, and operate a device that continuously measures the operating temperature in the firebox of each thermal incinerator.
 - (4) Following the performance test for the curing oven, the Permittee shall monitor and record the free-formaldehyde content of each resin lot and the formulation of each batch of binder used, including the formaldehyde content.
 - (5) Following the performance test of the curing oven, measure and record the average operating temperature of the incinerator as specified in 40 CFR Part 63.1185(b).
 - (6) Operate and maintain the incinerator as specified in the operations, maintenance, and monitoring plan required by 40 CFR Part 63.1187.

These monitoring conditions are necessary to ensure compliance with 40 CFR 63, Subpart DDD.

Air Toxic Emissions

Indiana presently requests applicants to provide information on emissions of the 188 hazardous air pollutants (HAPs) set out in the Clean Air Act Amendments of 1990. These pollutants are either car-

cinogenic or otherwise considered toxic and are commonly used by industries. They are listed as air toxics on the Office of Air Management (OAM) Part 70 Application Form GSD-08.

- (a) This source will emit levels of air toxics greater than those that constitute major source applicability according to Section 112 of the 1990 Clean Air Act Amendments.
- (b) See pages 1 - 6 of 6 of Appendix A for the attached calculations for detailed air toxic calculations.

Conclusion

The operation of this mineral wool manufacturing source shall be subject to the conditions of the attached proposed Part 70 Permit No. T 169-6218-00009.

Appendix A: Potential Emission Calculations

Company Name: Thermafiber LLC, Wabash Plant
Address City IN Zip: 3711 West Mill Street Extended, Wabash, IN 46992
Part 70 : T 169-6218
Plt ID: T 169-00009
Reviewer: Mark L. Kramer
Date: July 2, 1996

Emission Unit	P2		Uncontrolled Emission Rate (lbs/hr)	Uncontrolled Emission Rate (tons/yr)	Control Efficiency (%)	Controlled Emission Rate (lbs/hr)	Controlled Emission Rate (tons/yr)	
	1 Cupola							
Pollutant	Maximum Rate (tons/hr)	Emission Factor (lbs/tons)	Emission Rate (lbs/hr)	Emission Rate (tons/yr)	Control Efficiency (%)	Emission Rate (lbs/hr)	Emission Rate (tons/yr)	
PM	7.00	18.460	129.2	566.0	89.2%	14.0	61.1	Emission factors for PM and PM10 are from stack tests
PM-10	7.00	8.861	62.0	271.7	89.2%	6.70	29.3	Emission factors for PM and PM10 are from stack tests
SO2	8.08	8.00	64.6	283.1	0.0%	64.6	283.1	AP-42
NOx	8.08	1.600	12.9	56.6	0.0%	12.9	56.607	AP-42
VOC	1.08	0.0400	0.0431	0.189	0.0%	0.043	0.189	AP-42
CO	8.08	250.00	2019.8	8846.8	0.0%	2019.8	8846.8	AP-42
PM = tons of mineral charged per hour & SO2, NOx and CO are total charge with fuel, VOC just fuel alone								
Pollutant	Maximum Rate (tons/hr)	Emission Factor (lbs/lbs)	Uncontrolled Emission Rate (lbs/hr)	Uncontrolled Emission Rate (tons/yr)	Control Efficiency (%)	Controlled Emission Rate (lbs/hr)	Controlled Emission Rate (tons/yr)	
Lead	0.066	0.0000604	0.008	0.035	89.2%	0.001	0.004	US EPA Birmingham Tests
Mn	0.065	0.0036	0.466	2.0	89.2%	0.050	0.220	US EPA Birmingham Tests
Cr	0.065	0.000324	0.042	0.183	89.2%	0.005	0.020	US EPA Birmingham Tests
Ni	0.065	0.00022	0.028	0.125	89.2%	0.003	0.013	US EPA Birmingham Tests
carbonyl sulfide	7.00	0.0015	21.0	91.98	0.0%	21.0	92.0	Engineering Judgement
arsenic	0.063	0.000041	0.00513333	0.022	89.2%	0.001	0.002	US EPA Birmingham Tests
barium	0.065	0.000473	0.06113333	0.268	89.2%	0.007	0.029	US EPA Birmingham Tests
beryllium	0.064	0.00000584	0.0007	0.003	89.2%	0.000	0.000	US EPA Birmingham Tests
cadmium	0.064	0.000067	0.009	0.038	89.2%	0.001	0.004	US EPA Birmingham Tests
antimony	0.065	0.000756	0.098	0.428	89.2%	0.011	0.046	US EPA Birmingham Tests
selenium	0.065	0.000108	0.014	0.061	89.2%	0.002	0.007	US EPA Birmingham Tests

Emission factors for PM and PM10 from stack tests

Max. rates are total charge for SO2 and CO, coke for VOC and minerals for PM and PM10

Emission Unit	P4 1 Cupola		Uncontrolled Emission Rate (lbs/hr)	Uncontrolled Emission Rate (tons/yr)	Control Efficiency (%)	Controlled Emission Rate (lbs/hr)	Controlled Emission Rate (tons/yr)	
	Maximum Rate (tons/hr)	Emission Factor (lbs/tons)						
PM	8.00	18.460	147.7	646.8	91.5%	12.6	55.0	Emission factors for PM and PM10 are from stack tests
PM-10	8.00	9.599	76.8	336.4	91.5%	6.53	28.6	Emission factors for PM and PM10 are from stack tests
SO2	9.23	8.00	73.9	323.5	0.0%	73.9	323.5	AP-42
NOx	9.23	1.600	14.77	64.7	0.0%	14.8	64.694	AP-42
VOC	1.23	0.0400	0.0493	0.22	0.0%	0.049	0.216	AP-42
CO	9.23	250.00	2307.9	10108.5	0.0%	2307.9	10108.5	AP-42
PM = tons of mineral charged per hour & SO2, NOx and CO are total charge with fuel, VOC just fuel alone								
Pollutant	Maximum Rate (tons/hr)	Emission Factor (lbs/lbs)	Uncontrolled Emission Rate (lbs/hr)	Uncontrolled Emission Rate (tons/yr)	Control Efficiency (%)	Controlled Emission Rate (lbs/hr)	Controlled Emission Rate (tons/yr)	
Lead	0.075	0.0000604	0.009	0.040	91.5%	0.001	0.003	US EPA Birmingham Tests
Mn	0.074	0.0036	0.53	2.3	91.5%	0.045	0.198	US EPA Birmingham Tests
Cr	0.074	0.000324	0.048	0.210	91.5%	0.004	0.018	US EPA Birmingham Tests
Ni	0.074	0.00022	0.033	0.142	91.5%	0.003	0.012	US EPA Birmingham Tests
carbonyl sulfide	8	0.0015	24	105.12	0.0%	24.0	105.120	Engineering Judgement
arsenic	0.072	0.000041	0.00586667	0.026	91.5%	0.000	0.002	US EPA Birmingham Tests
barium	0.074	0.000473	0.06986667	0.306	91.5%	0.006	0.026	US EPA Birmingham Tests
beryllium	0.073	0.00000584	0.0009	0.004	91.5%	0.000	0.000	US EPA Birmingham Tests
cadmium	0.138	0.000067	0.019	0.081	91.5%	0.002	0.007	US EPA Birmingham Tests
antimony	0.074	0.000756	0.112	0.489	91.5%	0.009	0.042	US EPA Birmingham Tests
selenium	0.074	0.000108	0.016	0.070	91.5%	0.001	0.006	US EPA Birmingham Tests

Max. rates are total charge for SO2 and CO, coke for VOC and minerals for PM and PM10

Emission Unit		P6 Blowchamber #4						
Pollutant	Maximum Rate* (tons/hr)	Emission Factor (lbs/tons)	Uncontrolled Emission Rate (lbs/hr)	Uncontrolled Emission Rate (tons/yr)	Control Efficiency (%)	Controlled Emission Rate (lbs/hr)	Controlled Emission Rate (tons/yr)	
PM	8.0	2.67	21.36	93.6	38.0%	13.2	58.0	Emission factors for PM and PM10 are from stack tests
PM-10	8.0	1.18	9.44	41.3	0.0%	9.4	41.35	Emission factors for PM and PM10 are from stack tests
SO2	8.0	0.087	0.70	3.05	0.0%	0.70	3.05	
NOx	8.0	0.00	0.00	0.00	0.0%	0.00	0.00	
VOC	8.0	9.20	73.62	322.5	91.0%	6.63	29.02	Tested at a similar plant
CO	8.0	0.00	0.00	0.00	0.0%	0.00	0.00	
Lead	8.0	0.00	0.00	0.00	0.0%	0.00	0.00	
Mn	8.0	0.00	0.00	0.00	0.0%	0.00	0.00	
Cr	8.0	0.00	0.00	0.00	0.0%	0.00	0.00	
Ni	8.0	0.00	0.00	0.00	0.0%	0.00	0.00	
fine min fib	8.0	0.008	0.065	0.285	0.0%	0.065	0.285	Tested at a similar plant

* Based on throughput of mineral fibers

Emission factors from stack tests and SO2 from AP-42

Emission Unit		P7 Curing oven (EU-P7)						
Pollutant	Maximum Rate (tons/hr)	Emission Factor (lbs/tons)	Uncontrolled Emission Rate (lbs/hr)	Uncontrolled Emission Rate (tons/yr)	Control Efficiency (%)	Controlled Emission Rate (lbs/hr)	Controlled Emission Rate (tons/yr)	
PM	7.0	0.39	2.7300	11.96	0.0%	2.73	11.96	
PM-10	7.0	0.37	2.5900	11.34	0.0%	2.59	11.34	
SO2	7.0	1.20	8.40	36.79	0.0%	8.40	36.79	
NOx	7.0	0.16	1.12	4.91	0.0%	1.12	4.91	
VOC	7.0	1.00	7.00	30.66	0.0%	7.00	30.66	
CO	7.0	0.00	0.00	0.00	0.0%	0.00	0.00	
Lead	7.0	0.00	0.00	0.00	0.0%	0.00	0.00	
Mn	7.0	0.00	0.00	0.00	0.0%	0.00	0.00	
Cr	7.0	0.00	0.00	0.00	0.0%	0.00	0.00	
Ni	7.0	0.00	0.00	0.00	0.0%	0.00	0.00	
fine min fib	7.0	0.00	0.00	0.00	0.0%	0.00	0.00	

Emission factors from US EPA AIRS SCC 3-05-017-04, PM & PM-10 based upon stack tests from a 4.42 TPH curing oven at their Tacoma Washington Plant.

Emission Unit		P8 Blowchamber #2						
Pollutant	Maximum Rate* (tons/hr)	Emission Factor (lbs/tons)	Uncontrolled Emission Rate (lbs/hr)	Uncontrolled Emission Rate (tons/yr)	Control Efficiency (%)	Controlled Emission Rate (lbs/hr)	Controlled Emission Rate (tons/yr)	
PM	7.0	0.97	6.79	29.74	13.1%	5.90	25.8	
PM-10	7.0	0.95	6.65	29.1	13.1%	5.78	25.3	
SO2	7.0	0.087	0.61	2.67	0.0%	0.609	2.67	
NOx	7.0	0.00	0.00	0	0.0%	0.00	0.0	
VOC	7.0	0.90	6.30	27.6	0.0%	6.30	27.6	
CO	7.0	0.00	0.00	0	0.0%	0.00	0.0	
Lead	7.0	0.00	0.00	0	0.0%	0.00	0.0	
Mn	7.0	0.00	0.00	0	0.0%	0.00	0.0	
Cr	7.0	0.00	0.00	0	0.0%	0.00	0.0	
Ni	7.0	0.00	0.00	0	0.0%	0.00	0.0	
fine min fib	7.0	0.011	0.077	0.336	0.0%	0.077	0.336	

Emission factors for PM and PM10 from stack tests

Emission factors for fine material fibers from a stack test at a similar facility

* Based on throughput of mineral fibers

Emission Unit		P9 Trimming, Sizing Section (EU-P9)					
Pollutant	Maximum Rate (tons/hr)	Emission Factor (lbs/tons)	Uncontrolled Emission Rate (lbs/hr)	Uncontrolled Emission Rate (tons/yr)	Control Efficiency (%)	Controlled Emission Rate (lbs/hr)	Controlled Emission Rate (tons/yr)
PM	7.0	0.495	3.47	15.18	0.0%	3.47	15.18
PM-10	7.0	0.495	3.47	15.18	0.0%	3.47	15.18
SO ₂	7.0	0.00	0.00	0.00	0.0%	0.00	0.00
NO _x	7.0	0.00	0.00	0.00	0.0%	0.00	0.00
VOC	7.0	0.00	0.00	0.00	0.0%	0.00	0.00
CO	7.0	0.00	0.00	0.00	0.0%	0.00	0.00
Lead	7.0	0.00	0.00	0.00	0.0%	0.00	0.00
Mn	7.0	0.00	0.00	0.00	0.0%	0.00	0.00
Cr	7.0	0.00	0.00	0.00	0.0%	0.00	0.00
Ni	7.0	0.00	0.00	0.00	0.0%	0.00	0.00
fine min fib	7.0	0.00	0.00	0.00	0.0%	0.00	0.00

Based on a grain loading of 0.02 grains per cubic foot of outlet air & a flow rate of 20000 cfm

Emission Unit		P10 Cooling Section #2 (EU-P10)					
Pollutant	Maximum Rate (tons/hr)	Emission Factor (lbs/tons)	Uncontrolled Emission Rate (lbs/hr)	Uncontrolled Emission Rate (tons/yr)	Control Efficiency (%)	Controlled Emission Rate (lbs/hr)	Controlled Emission Rate (tons/yr)
PM	7.0	2.000	14.00	61.32	0.0%	14.00	61.32
PM-10	7.0	1.900	13.30	58.25	0.0%	13.30	58.25
SO ₂	7.0	0.00	0.00	0.00	0.0%	0.00	0.00
NO _x	7.0	0.00	0.00	0.00	0.0%	0.00	0.00
VOC	7.0	0.04	0.28	1.23	0.0%	0.28	1.23
CO	7.0	0.00	0.00	0.00	0.0%	0.00	0.00
Lead	7.0	0.00	0.00	0.00	0.0%	0.00	0.00
Mn	7.0	0.00	0.00	0.00	0.0%	0.00	0.00
Cr	7.0	0.00	0.00	0.00	0.0%	0.00	0.00
Ni	7.0	0.00	0.00	0.00	0.0%	0.00	0.00
fine min fib	7.0	0.00	0.00	0.00	0.0%	0.00	0.00

Emission factors from US EPA AIRS SCC 3-05-017-05

Emission Unit		P11 Boiler #1					
Pollutant	Maximum Rate (MMBtu/hr)	Emission Factor (lbs/MMBtu)	Uncontrolled Emission Rate (lbs/hr)	Uncontrolled Emission Rate (tons/yr)	Control Efficiency (%)	Controlled Emission Rate (lbs/hr)	Controlled Emission Rate (tons/yr)
PM	12.5	1.9	0.023	0.102	0.0%	0.023	0.102
PM-10	12.5	7.6	0.093	0.408	0.0%	0.093	0.408
SO ₂	12.5	0.6	0.007	0.032	0.0%	0.007	0.032
NO _x	12.5	100.0	1.225	5.368	0.0%	1.225	5.37
VOC	12.5	5.5	0.067	0.295	0.0%	0.067	0.295
CO	12.5	84.0	1.029	4.509	0.0%	1.029	4.51
Lead	12.5	0.00	0.000	0.00	0.0%	0.00	0.000
Mn	12.5	0.00	0.000	0.00	0.0%	0.00	0.000
Cr	12.5	0.00	0.000	0.00	0.0%	0.00	0.000
Ni	12.5	0.00	0.000	0.00	0.0%	0.00	0.000

*PM emission factor is filterable PM only. PM-10 emission factor is filterable and condensable PM-10 combined.

Emission Unit Storage Piles

Pollutant	Uncontrolled Emission Rate (lbs/hr)	Uncontrolled Emission Rate (tons/yr)	Control Efficiency (%)	Controlled Emission Rate (lbs/hr)	Controlled Emission Rate (tons/yr)		
PM	1.49	6.53	0.0%	1.49	6.53	AP-42	Verified Applicants Calculations
PM-10	0.520	2.28	0.0%	0.520	2.28	AP-42	Verified Applicants Calculations

Emission Unit Roads

Pollutant	Uncontrolled Emission Rate (lbs/hr)	Uncontrolled Emission Rate (tons/yr)	Control Efficiency (%)	Controlled Emission Rate (lbs/hr)	Controlled Emission Rate (tons/yr)		
PM	0.522	2.29	0.0%	0.522	2.29	AP-42	Verified Applicants Calculations
PM-10	0.188	0.823	0.0%	0.188	0.823	AP-42	Verified Applicants Calculations

**Emission Unit Loading and Unloading
Coke, slag, feldspar, shot brick, copper slag, silica gravel, shot and raw material fine**

Pollutant	Uncontrolled Emission Rate (lbs/hr)	Uncontrolled Emission Rate (tons/yr)	Control Efficiency (%)	Controlled Emission Rate (lbs/hr)	Controlled Emission Rate (tons/yr)		
PM	1.49	6.53	0.0%	1.49	6.53	AP-42	Verified Applicants Calculations
PM-10	1.49	6.53	0.0%	1.49	6.53	AP-42	Verified Applicants Calculations

Emission Unit Supplemental Natural Gas Combustion for Cupolas P2 and P4 of 10.47 and 11.97 mmBtu/hr

Pollutant	Maximum Rate (MMBtu/hr)	Emission Factor (lbs/mmcf)	Uncontrolled Emission Rate (lbs/hr)	Uncontrolled Emission Rate (tons/yr)	Control Efficiency (%)	Controlled Emission Rate (lbs/hr)	Controlled Emission Rate (tons/yr)	
PM	22.44	1.9	0.042	0.183	0.0%	0.042	0.183	AP-42 Chapter 1.4
PM-10	22.44	7.6	0.167	0.732	0.0%	0.167	0.732	AP-42 Chapter 1.4
SO2	22.44	0.6	0.013	0.058	0.0%	0.013	0.058	AP-42 Chapter 1.4
NOx	22.44	100.0	2.200	9.636	0.0%	2.200	9.64	AP-42 Chapter 1.4
VOC	22.44	5.5	0.121	0.530	0.0%	0.121	0.530	AP-42 Chapter 1.4
CO	22.44	84.0	1.848	8.094	0.0%	1.848	8.09	AP-42 Chapter 1.4
Lead	22.44	0.00	0.000	0.00	0.0%	0.00	0.000	
Mn	22.44	0.00	0.000	0.00	0.0%	0.00	0.000	
Cr	22.44	0.00	0.000	0.00	0.0%	0.00	0.000	
Ni	22.44	0.00	0.000	0.00	0.0%	0.00	0.000	

*PM emission factor is filterable PM only. PM-10 emission factor is filterable and condensable PM-10 combined.

**Emission Unit Insignificant Boiler
Boiler #2**

Pollutant	Maximum Rate (MMBtu/hr)	Emission Factor (lbs/mmcf)	Uncontrolled Emission Rate (lbs/hr)	Uncontrolled Emission Rate (tons/yr)	Control Efficiency (%)	Controlled Emission Rate (lbs/hr)	Controlled Emission Rate (tons/yr)	
PM	4.5	1.9	0.008	0.037	0.0%	0.008	0.037	AP-42 Chapter 1.4
PM-10	4.5	7.6	0.034	0.147	0.0%	0.034	0.147	AP-42 Chapter 1.4
SO2	4.5	0.6	0.003	0.012	0.0%	0.003	0.012	AP-42 Chapter 1.4
NOx	4.5	100.0	0.441	1.93	0.0%	0.441	1.93	AP-42 Chapter 1.4
VOC	4.5	5.5	0.024	0.106	0.0%	0.024	0.106	AP-42 Chapter 1.4
CO	4.5	84.0	0.371	1.62	0.0%	0.371	1.62	AP-42 Chapter 1.4
Lead	4.5	0.00	0.000	0.00	0.0%	0.00	0.000	
Mn	4.5	0.00	0.000	0.00	0.0%	0.00	0.000	
Cr	4.5	0.00	0.000	0.00	0.0%	0.00	0.000	
Ni	4.5	0.00	0.000	0.00	0.0%	0.00	0.000	

*PM emission factor is filterable PM only. PM-10 emission factor is filterable and condensable PM-10 combined.

Significant Emission Units	Summary of Emissions																		
	Uncontrolled Potential Emissions																		
	PM (tons/yr)	PM-10 (tons/yr)	SO2 (tons/yr)	NOx (tons/yr)	VOC (tons/yr)	CO (tons/yr)	Lead (tons/yr)	Mn (tons/yr)	Cr (tons/yr)	Ni (tons/yr)	cab sulfide (tons/yr)	arsenic (tons/yr)	barium (tons/yr)	beryllium (tons/yr)	cadmium (tons/yr)	antimony (tons/yr)	selenium (tons/yr)	fine min fib (tons/yr)	Total HAPs (tons/yr)
P2	566	272	283	56.6	0.189	8847	0.035	2.04	0.183	0.125	92.0	0.022	0.268	0.003	0.038	0.428	0.061	0.000	95.2
P4	647	336	323	64.7	0.216	10108	0.040	2.33	0.210	0.142	105	0.026	0.306	0.004	0.081	0.489	0.070	0.000	109
P6	93.6	41.3	3.048	0.000	322	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.285	0.285
P7	12.0	11.3	36.792	4.91	30.7	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
P8	29.7	29.1	2.667	0.000	27.6	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.336	0.336
P9	15.2	15.2	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
P10	61.3	58.3	0.000	0.000	1.23	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
P11	0.102	0.408	0.032	5.37	0.295	4.51	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Storage Piles	6.53	2.28																	
Roads	2.29	0.823																	
Loading	6.53	6.53																	
P2, P4 Comb	0.183	0.732	0.058	9.636	0.530	8.094													
Boiler #2	0.037	0.147	0.012	1.932	0.106	1.623													
Total	1440	774	649	143	383	18969	0.074	4.372	0.393	0.267	197.1	0.048	0.574	0.007	0.119	0.917	0.131	0.621	205
Significant Emission Units	Controlled Potential Emissions																		
	PM (tons/yr)	PM-10 (tons/yr)	SO2 (tons/yr)	NOx (tons/yr)	VOC (tons/yr)	CO (tons/yr)	Lead (tons/yr)	Mn (tons/yr)	Cr (tons/yr)	Ni (tons/yr)	cab sulfide (tons/yr)	arsenic (tons/yr)	barium (tons/yr)	beryllium (tons/yr)	cadmium (tons/yr)	antimony (tons/yr)	selenium (tons/yr)	fine min fib (tons/yr)	Total HAPs (tons/yr)
P2	61.1	29.3	283.1	56.607	0.189	8846.8	0.004	0.220	0.020	0.013	91.98	0.002	0.029	0.000	0.004	0.046	0.007	0.000	92.3
P4	55.0	28.6	323.5	64.694	0.216	10108.5	0.003	0.198	0.018	0.012	105.12	0.002	0.026	0.000	0.007	0.042	0.006	0.000	105.4
P6	58.0	41.3	3.048	0.000	29.021	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.285	0.285
P7	12.0	11.3	36.792	4.906	30.660	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
P8	25.8	25.3	2.667	0.000	27.594	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.336	0.336
P9	15.2	15.2	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
P10	61.3	58.3	0.000	0.000	1.226	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
P11	0.102	0.408	0.032	5.368	0.295	4.509	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Storage Piles	6.53	2.28																	
Roads	2.29	0.823																	
Loading	6.53	6.53																	
P2, P4 Comb	0.183	0.732	0.058	9.636	0.530	8.094													
Boiler #2	0.037	0.147	0.012	1.932	0.106	1.623													
Total	304	220	649	143.1	89.8	18969	0.007	0.419	0.038	0.026	197	0.005	0.055	0.001	0.011	0.088	0.013	0.621	198.4

Allowable PM Rate of Emissions Pursuant to 326 IAC 6-3-2

Emission Units	Process Rate	Process Weight Rate	Allowable Emissions
	(lbs/hr)	(tons/hr)	(lbs/hr)
P2	14,000	7.00	15.10
P4	16,000	8.00	16.51
P6 (fiber & oil)	16,200	8.10	16.65
P7	14,000	7.00	15.10
P8 (fibers, binder & water)	16,800	8.40	17.06
P9	14,000	7.00	15.10
P10	14,000	7.00	15.10

Methodology Allowable Emissions = 55(Process Weight Rate)^{0.11} - 40 for process rates greater than 30 tons per hour
Allowable Emissions = 4.1(Process Weight Rate)^{0.67} for process rates less than or equal to 30 tons per hour

Subpart Dc-Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units

Source: 55 FR 37683, Sept. 12, 1990, unless otherwise noted.

§ 60.40c Applicability and delegation of authority.

(a) The affected facility to which this subpart applies is each steam generating unit for which construction, modification, or reconstruction is commenced after June 9, 1989 and that has a maximum design heat input capacity of 29 megawatts (MW) (100 million Btu per hour (Btu/hr)) or less, but greater than or equal to 2.9 MW (10 million Btu/hr).

(b) In delegating implementation and enforcement authority to a State under section 111(c) of the Clean Air Act, § 60.48c(a)(4) shall be retained by the Administrator and not transferred to a State.

§ 60.41c Definitions.

As used in this subpart, all terms not defined herein shall have the meaning given them in the Clean Air Act and in subpart A of this part.

Annual capacity factor means the ratio between the actual heat input to a steam generating unit from an individual fuel or combination of fuels during a period of 12 consecutive calendar months and the potential heat input to the steam generating unit from all fuels had the steam generating unit been operated for 8,760 hours during that 12-month period at the maximum design heat input capacity. In the case of steam generating units that are rented or leased, the actual heat input shall be determined based on the combined heat input from all operations of the affected facility during a period of 12 consecutive calendar months.

Coal means all solid fuels classified as anthracite, bituminous, subbituminous, or lignite by the American Society for Testing and Materials in ASTM D388-77, "Standard Specification for Classification of Coals by Rank" (incorporated by reference-see § 60.17); coal refuse; and petroleum coke. Synthetic fuels derived from coal for the purpose of creating useful heat, including but not limited to solvent-refined coal, gasified coal, coal-oil mixtures, and coal-water mixtures, are included in this definition for the purposes of this subpart.

Coal refuse means any by-product of coal mining or coal cleaning operations with an ash content greater than 50 percent (by weight) and a heating value less than 13,900 kilojoules per kilogram (kJ/kg) (6,000 Btu per pound (Btu/lb) on a dry basis.

Cogeneration steam generating unit means a steam generating unit that simultaneously produces both electrical (or mechanical) and thermal energy from the same primary energy source.

Combined cycle system means a system in which a separate source (such as a stationary gas turbine, internal combustion engine,

or kiln) provides exhaust gas to a steam generating unit.

Conventional technology means wet flue gas desulfurization technology, dry flue gas desulfurization technology, atmospheric fluidized bed combustion technology, and oil hydrosulfurization technology.

Distillate oil means fuel oil that complies with the specifications for fuel oil numbers 1 or 2, as defined by the American Society for Testing and Materials in ASTM D396-78, "Standard Specification for Fuel Oils" (incorporated by reference-see § 60.17).

Dry flue gas desulfurization technology means a sulfur dioxide (SO₂) control system that is located between the steam generating unit and the exhaust vent or stack, and that removes sulfur oxides from the combustion gases of the steam generating unit by contacting the combustion gases with an alkaline slurry or solution and forming a dry powder material. This definition includes devices where the dry powder material is subsequently converted to another form. Alkaline reagents used in dry flue gas desulfurization systems include, but are not limited to, lime and sodium compounds.

Duct burner means a device that combusts fuel and that is placed in the exhaust duct from another source (such as a stationary gas turbine, internal combustion engine, kiln, etc.) to allow the firing of additional fuel to heat the exhaust gases before the exhaust gases enter a steam generating unit.

Emerging technology means any SO₂ control system that is not defined as a conventional technology under this section, and for which the owner or operator of the affected facility has received approval from the Administrator to operate as an emerging technology under § 60.48c(a)(4).

Federally enforceable means all limitations and conditions that are enforceable by the Administrator, including the requirements of 40 CFR Parts 60 and 61, requirements within any applicable State implementation plan, and any permit requirements established under 40 CFR 52.21 or under 40 CFR 51.18 and 40 CFR 51.24.

Fluidized bed combustion technology means a device wherein fuel is distributed onto a bed (or series of beds) of limestone aggregate (or other sorbent materials) for combustion; and these materials are forced upward in the device by the flow of combustion air and the gaseous products of combustion. Fluidized bed combustion technology includes, but is not limited to, bubbling bed units and circulating bed units.

Fuel pretreatment means a process that removes a portion of the sulfur in a fuel before combustion of the fuel in a steam generating unit.

Heat input means heat derived from combustion of fuel in a steam generating unit and does not include the heat derived from preheated combustion air, recirculated flue gases, or exhaust gases from other sources (such as stationary gas turbines, internal combustion engines, and kilns).

Heat transfer medium means any material that is used to transfer heat from one point to another point.

Maximum design heat input capacity means the ability of a steam generating unit to combust a stated maximum amount of fuel (or combination of fuels) on a steady state basis as determined

by the physical design and characteristics of the steam generating unit.

Natural gas means (1) a naturally occurring mixture of hydrocarbon and nonhydrocarbon gases found in geologic formations beneath the earth's surface, of which the principal constituent is methane, or (2) liquefied petroleum (LP) gas, as defined by the American Society for Testing and Materials in ASTM D1835-86, ``Standard Specification for Liquefied Petroleum Gases" (incorporated by reference-see § 60.17).

Noncontinental area means the State of Hawaii, the Virgin Islands, Guam, American Samoa, the Commonwealth of Puerto Rico, or the Northern Mariana Islands.

Oil means crude oil or petroleum, or a liquid fuel derived from crude oil or petroleum, including distillate oil and residual oil.

Potential sulfur dioxide emission rate means the theoretical SO₂ emissions (nanograms per joule [ng/J], or pounds per million Btu [lb/million Btu] heat input) that would result from combusting fuel in an uncleaned state and without using emission control systems.

Process heater means a device that is primarily used to heat a material to initiate or promote a chemical reaction in which the material participates as a reactant or catalyst.

Residual oil means crude oil, fuel oil that does not comply with the specifications under the definition of distillate oil, and all fuel oil numbers 4, 5, and 6, as defined by the American Society for Testing and Materials in ASTM D396-78, ``Standard Specification for Fuel Oils" (incorporated by reference-see § 60.17).

Steam generating unit means a device that combusts any fuel and produces steam or heats water or any other heat transfer medium. This term includes any duct burner that combusts fuel and is part of a combined cycle system. This term does not include process heaters as defined in this subpart.

Steam generating unit operating day means a 24-hour period between 12:00 midnight and the following midnight during which any fuel is combusted at any time in the steam generating unit. It is not necessary for fuel to be combusted continuously for the entire 24-hour period.

Wet flue gas desulfurization technology means an SO₂ control system that is located between the steam generating unit and the exhaust vent or stack, and that removes sulfur oxides from the combustion gases of the steam generating unit by contacting the combustion gases with an alkaline slurry or solution and forming a liquid material. This definition includes devices where the liquid material is subsequently converted to another form. Alkaline reagents used in wet flue gas desulfurization systems include, but are not limited to, lime, limestone, and sodium compounds.

Wet scrubber system means any emission control device that mixes an aqueous stream or slurry with the exhaust gases from a steam generating unit to control emissions of particulate matter (PM) or SO₂.

Wood means wood, wood residue, bark, or any derivative fuel

or residue thereof, in any form, including but not limited to sawdust, sanderdust, wood chips, scraps, slabs, millings, shavings, and processed pellets made from wood or other forest residues.

§ 60.42c Standard for sulfur dioxide.

(a) Except as provided in paragraphs (b), (c), and (e) of this section, on and after the date on which the initial performance test is completed or required to be completed under § 60.8 of this part, whichever date comes first, the owner the operator of an affected facility that combusts only coal shall neither:

- (1) cause to be discharged into the atmosphere from that affected facility any gases that contain SO₂ in excess of 10 percent (0.10) of the potential SO₂ emission rate (90 percent reduction);
- nor (2) cause to be discharged into the atmosphere from that affected facility any gases that contain SO₂ in excess of 520 ng/J (1.2 lb/million Btu) heat input. If coal is combusted with other fuels, the affected facility is subject to the 90 percent SO₂ reduction requirement specified in this paragraph and the emission limit is determined pursuant to paragraph (e)(2) of this section.

(b) Except as provided in paragraphs (c) and (e) of this section, on and after the date on which the initial performance test is completed or required to be completed under § 60.8 of this part, whichever date comes first, the owner or operator of an affected facility that:

(1) Combusts coal refuse alone in a fluidized bed combustion steam generating unit shall neither:

(i) Cause to be discharged into the atmosphere from that affected facility any gases that contain SO₂ in excess of 20 percent (0.20) of the potential SO₂ emission rate (80 percent reduction);

nor

(ii) Cause to be discharged into the atmosphere from that affected facility any gases that contain SO₂ in excess of 520 ng/J (1.2 lb/million Btu) heat input. If coal is fired with coal refuse, the affected facility is subject to paragraph (a) of this section. If oil or any other fuel (except coal) is fired with coal refuse, the affected facility is subject to the 90 percent SO₂ reduction requirement specified in paragraph (a) of this section and the emission limit determined pursuant to paragraph (e)(2) of this section.

(2) Combusts only coal and that uses an emerging technology for the control of SO₂ emissions shall neither:

(i) Cause to be discharged into the atmosphere from that affected facility any gases that contain SO₂ in excess of 50 percent (0.50) of the potential SO₂ emission rate (50 percent reduction);

nor

(ii) Cause to be discharged into the atmosphere from that affected facility any gases that contain SO₂ in excess of 260 ng/J (0.60 lb/million Btu) heat input. If coal is combusted with other fuels, the affected facility is subject to the 50 percent SO₂ reduction requirement specified in this paragraph and the emission limit determined pursuant to paragraph (e)(2) of this section.

(c) On and after the date on which the initial performance test is completed or required to be completed under § 60.8 of this part, whichever date comes first, no owner or operator of an affected facility that combusts coal, alone or in combination with any other fuel, and is listed in paragraphs (c)(1), (2), (3), or (4) of this section shall cause to be discharged into the atmosphere from that affected facility any gases that contain SO₂ in excess of the emission limit determined pursuant to paragraph (e)(2) of this section. Percent reduction requirements are not applicable to affected facilities under this paragraph.

(1) Affected facilities that have a heat input capacity of 22 MW (75 million Btu/hr) or less.

(2) Affected facilities that have an annual capacity for coal of 55 percent (0.55) or less and are subject to a Federally enforceable requirement limiting operation of the affected facility to an annual capacity factor for coal of 55 percent (0.55) or less.

(3) Affected facilities located in a noncontinental area.

(4) Affected facilities that combust coal in a duct burner as part of a combined cycle system where 30 percent (0.30) or less of the heat entering the steam generating unit is from combustion of coal in the duct burner and 70 percent (0.70) or more of the heat entering the steam generating unit is from exhaust gases entering the duct burner.

(d) On and after the date on which the initial performance test is completed or required to be completed under § 60.8 of this part, whichever date comes first, no owner or operator of an affected facility that combusts oil shall cause to be discharged into the atmosphere from that affected facility any gases that contain SO₂ in excess of 215 ng/J (0.50 lb/million Btu) heat input; or, as an alternative, no owner or operator of an affected facility that combusts oil shall combust oil in the affected facility that contains greater than 0.5 weight percent sulfur. The percent reduction requirements are not applicable to affected facilities under this paragraph.

(e) On and after the date on which the initial performance test is completed or required to be completed under § 60.8 of this part, whichever date comes first, no owner or operator of an affected facility that combusts coal, oil, or coal and oil with any other fuel shall cause to be discharged into the atmosphere from that affected facility any gases that contain SO₂ in excess of the following:

(1) The percent of potential SO₂ emission rate required under paragraph (a) or (b)(2) of this section, as applicable, for any affected facility that

(i) Combusts coal in combination with any other fuel,

(ii) Has a heat input capacity greater than 22 MW (75 million Btu/hr), and

(iii) Has an annual capacity factor for coal greater than 55 percent (0.55); and

(2) The emission limit determined according to the following formula for any affected facility that combusts coal, oil, or coal and oil with any other fuel:

$$Es = (KaHa + KbHb + KcHc) / (Ha + Hb + Hc)$$

where:

Es is the SO₂ emission limit, expressed in ng/J or lb/million Btu heat input,

Ka is 520 ng/J (1.2 lb/million Btu),

Kb is 260 ng/J (0.60 lb/million Btu),

Kc is 215 ng/J (0.50 lb/million Btu),

Ha is the heat input from the combustion of coal, except coal combusted in an affected facility subject to paragraph (b)(2) of this section, in Joules (J) [million Btu]

Hb is the heat input from the combustion of coal in an affected facility subject to paragraph (b)(2) of this section, in J (million Btu)

Hc is the heat input from the combustion of oil, in J (million Btu).

(f) Reduction in the potential SO₂ emission rate through fuel pretreatment is not credited toward the percent reduction requirement under paragraph (b)(2) of this section unless:

(1) Fuel pretreatment results in a 50 percent (0.50) or greater reduction in the potential SO₂ emission rate; and

(2) Emissions from the pretreated fuel (without either combustion or post-combustion SO₂ control) are equal to or less than the emission limits specified under paragraph (b)(2) of this section.

(g) Except as provided in paragraph (h) of this section, compliance with the percent reduction requirements, fuel oil sulfur limits, and emission limits of this section shall be determined on a 30-day rolling average basis.

(h) For affected facilities listed under paragraphs (h)(1), (2), or (3) of this section, compliance with the emission limits or fuel oil sulfur limits under this section may be determined based on a certification from the fuel supplier, as described under § 60.48c(f)(1), (2), or (3), as applicable.

(1) Distillate oil-fired affected facilities with heat input capacities between 2.9 and 29 MW (10 and 100 million Btu/hr).

(2) Residual oil-fired affected facilities with heat input capacities between 2.9 and 8.7 MW (10 and 30 million Btu/hr).

(3) Coal-fired facilities with heat input capacities between 2.9 and 8.7 MW (10 and 30 million Btu/hr).

(i) The SO₂ emission limits, fuel oil sulfur limits, and percent reduction requirements under this section apply at all times, including periods of startup, shutdown, and malfunction.

(j) Only the heat input supplied to the affected facility from the combustion of coal and oil is counted under this section. No credit is provided for the heat input to the affected facility from wood or other fuels or for heat derived from exhaust gases from other sources, such as stationary gas turbines, internal combustion engines, and kilns.

§ 60.43c Standard for particulate matter.

(a) On and after the date on which the initial performance test is completed or required to be completed under § 60.8 of this part, whichever date comes first, no owner or operator

of an affected facility that combusts coal or combusts mixtures of coal with other fuels and has a heat input capacity of 8.7 MW (30 million Btu/hr) or greater, shall cause to be discharged into the atmosphere from that affected facility any gases that contain PM in excess of the following emission limits:

(1) 22 ng/J (0.05 lb/million Btu) heat input if the affected facility combusts only coal, or combusts coal with other fuels and has an annual capacity factor for the other fuels of 10 percent (0.10) or less.

(2) 43 ng/J (0.10 lb/million Btu) heat input if the affected facility combusts coal with other fuels, has an annual capacity factor for the other fuels greater than 10 percent (0.10), and is subject to a federally enforceable requirement limiting operation of the affected facility to an annual capacity factor greater than 10 percent (0.10) for fuels other than coal.

(b) On and after the date on which the initial performance test is completed or required to be completed under § 60.8 of this part, whichever date comes first, no owner or operator of an affected facility that combusts wood or combusts mixtures of wood with other fuels (except coal) and has a heat input capacity of 8.7 MW (30 million Btu/hr) or greater, shall cause to be discharged into the atmosphere from that affected facility any gases that contain PM in excess of the following emissions limits:

(1) 43 ng/J (0.10 lb/million Btu) heat input if the affected facility has an annual capacity factor for wood greater than 30 percent (0.30); or

(2) 130 ng/J (0.30 lb/million Btu) heat input if the affected facility has an annual capacity factor for wood of 30 percent (0.30) or less and is subject to a federally enforceable requirement limiting operation of the affected facility to an annual capacity factor for wood of 30 percent (0.30) or less.

(c) On and after the date on which the initial performance test is completed or required to be completed under § 60.8 of this part, whichever date comes first, no owner or operator of an affected facility that combusts coal, wood, or oil and has a heat input capacity of 8.7 MW (30 million Btu/hr) or greater shall cause to be discharged into the atmosphere from that affected facility any gases that exhibit greater than 20 percent opacity (6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity.

(d) The PM and opacity standards under this section apply at all times, except during periods of startup, shutdown, or malfunction.

§ 60.44c Compliance and performance test methods and procedures for sulfur dioxide.

(a) Except as provided in paragraphs (g) and (h) of this section and in § 60.8(b), performance tests required under § 60.8 shall be conducted following the procedures specified in paragraphs (b), (c), (d), (e), and (f) of this section, as applicable. Section 60.8(f) does not apply to this section. The 30-day notice required in § 60.8(d) applies only to the initial performance

test unless otherwise specified by the Administrator.

(b) The initial performance test required under § 60.8 shall be conducted over 30 consecutive operating days of the steam generating unit. Compliance with the percent reduction requirements and SO₂ emission limits under § 60.42c shall be determined using a 30-day average. The first operating day included in the initial performance test shall be scheduled within 30 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after the initial startup of the facility. The steam generating unit load during the 30-day period does not have to be the maximum design heat input capacity, but must be representative of future operating conditions.

(c) After the initial performance test required under paragraph (b) and § 60.8, compliance with the percent reduction requirements and SO₂ emission limits under § 60.42c is based on the average percent reduction and the average SO₂ emission rates for 30 consecutive steam generating unit operating days. A separate performance test is completed at the end of each steam generating unit operating day, and a new 30-day average percent reduction and SO₂ emission rate are calculated to show compliance with the standard.

(d) If only coal, only oil, or a mixture of coal and oil is combusted in an affected facility, the procedures in Method 19 are used to determine the hourly SO₂ emission rate (E_{ho}) and the 30-day average SO₂ emission rate (E_{ao}). The hourly averages used to compute the 30-day averages are obtained from the continuous emission monitoring system (CEMS). Method 19 shall be used to calculate E_{ao} when using daily fuel sampling or Method 6B.

(e) If coal, oil, or coal and oil are combusted with other fuels:

(1) An adjusted E_{ho} (E_{hoo}) is used in Equation 19-19 of Method 19 to compute the adjusted E_{ao} (E_{ao0}). The E_{hoo} is computed using the following formula:

$$E_{hoo} = [E_{ho} - E_w(1 - X_k)] / X_k$$

where:

E_{hoo} is the adjusted E_{ho}, ng/J (lb/million Btu)

E_{ho} is the hourly SO₂ emission rate, ng/J (lb/million Btu)

E_w is the SO₂ concentration in fuels other than coal and oil combusted in the affected facility, as determined by fuel sampling and analysis procedures in Method 9, ng/J (lb/million Btu). The value E_w for each fuel lot is used for each hourly average during the time that the lot is being combusted. The owner or operator does not have to measure E_w if the owner or operator elects to assume E_w=0.

X_k is the fraction of the total heat input from fuel combustion derived from coal and oil, as determined by applicable procedures in Method 19.

(2) The owner or operator of an affected facility that qualifies under the provisions of § 60.42c(c) or (d) [where percent reduction is not required] does not have to measure the parameters E_w or X_k if the owner or operator of the affected facility elects

to measure emission rates of the coal or oil using the fuel sampling and analysis procedures under Method 19.

(f) Affected facilities subject to the percent reduction requirements under § 60.42c(a) or (b) shall determine compliance with the SO₂ emission limits under § 60.42c pursuant to paragraphs (d) or (e) of this section, and shall determine compliance with the percent reduction requirements using the following procedures:

(1) If only coal is combusted, the percent of potential SO₂ emission rate is computed using the following formula:

$$\%Ps = 100(1 - \%Rg/100)(1 - \%Rf/100)$$

where

%Ps is the percent of potential SO₂ emission rate, in percent

%Rg is the SO₂ removal efficiency of the control device as determined by Method 19, in percent

%Rf is the SO₂ removal efficiency of fuel pretreatment as determined by Method 19, in percent

(2) If coal, oil, or coal and oil are combusted with other fuels, the same procedures required in paragraph (f)(1) of this section are used, except as provided for in the following:

(i) To compute the %Ps, an adjusted %Rg (%Rgo) is computed from E_{aoo} from paragraph (e)(1) of this section and an adjusted average SO₂ inlet rate (E_{aio}) using the following formula:

$$\%Rgo = 100 [1.0 - E_{aoo}/E_{aio}]$$

where:

%Rgo is the adjusted %Rg, in percent

E_{aoo} is the adjusted E_{aoo}, ng/J (lb/million Btu)

E_{aio} is the adjusted average SO₂ inlet rate, ng/J (lb/million Btu)

(ii) To compute E_{aio}, an adjusted hourly SO₂ inlet rate (E_{hio}) is used. The E_{hio} is computed using the following formula:

$$E_{hio} = [E_{hi} - E_w (1 - X_k)] / X_k$$

where:

E_{hio} is the adjusted E_{hi}, ng/J (lb/million Btu)

E_{hi} is the hourly SO₂ inlet rate, ng/J (lb/million Btu)

E_w is the SO₂ concentration in fuels other than coal and oil combusted in the affected facility, as determined by fuel sampling and analysis procedures in Method 19, ng/J (lb/million Btu). The value E_w for each fuel lot is used for each hourly average during the time that the lot is being combusted. The owner or operator does not have to measure E_w if the owner or operator elects to assume E_w = 0.

X_k is the fraction of the total heat input from fuel combustion derived from coal and oil, as determined by applicable procedures in Method 19.

(g) For oil-fired affected facilities where the owner or operator seeks to demonstrate compliance with the fuel oil sulfur limits under § 60.42c based on shipment fuel sampling, the initial

performance test shall consist of sampling and analyzing the oil in the initial tank of oil to be fired in the steam generating unit to demonstrate that the oil contains 0.5 weight percent sulfur or less. Thereafter, the owner or operator of the affected facility shall sample the oil in the fuel tank after each new shipment of oil is received, as described under § 60.46c(d)(2).

(h) For affected facilities subject to § 60.42c(h)(1), (2), or (3) where the owner or operator seeks to demonstrate compliance with the SO₂ standards based on fuel supplier certification, the performance test shall consist of the certification, the certification from the fuel supplier, as described under § 60.48c(f)(1), (2), or (3), as applicable.

(i) The owner or operator of an affected facility seeking to demonstrate compliance with the SO₂ standards under § 60.42c(c)(2) shall demonstrate the maximum design heat input capacity of the steam generating unit by operating the steam generating unit at this capacity for 24 hours. This demonstration shall be made during the initial performance test, and a subsequent demonstration may be requested at any other time. If the demonstrated 24-hour averaged firing rate for the affected facility is less than the maximum design heat input capacity stated by the manufacturer of the affected facility, the demonstrated 24-hour average firing rate shall be used to determine the annual capacity factor for the affected facility; otherwise, the maximum design heat input capacity provided by the manufacturer shall be used.

(j) The owner or operator of an affected facility shall use all valid SO₂ emissions data in calculating %Ps and E_{ho} under paragraphs (d), (e), or (f) of this section, as applicable, whether or not the minimum emissions data requirements under § 60.46c(f) are achieved. All valid emissions data, including valid data collected during periods of startup, shutdown, and malfunction, shall be used in calculating %Ps or E_{ho} pursuant to paragraphs (d), (e), or (f) of this section, as applicable.

§ 60.45c Compliance and performance test methods and procedures for particulate matter.

(a) The owner or operator of an affected facility subject to the PM and/or opacity standards under § 60.43c shall conduct an initial performance test as required under § 60.8, and shall conduct subsequent performance tests as requested by the Administrator, to determine compliance with the standards using the following procedures and reference methods.

(1) Method 1 shall be used to select the sampling site and the number of traverse sampling points. The sampling time for each run shall be at least 120 minutes and the minimum sampling volume shall be 1.7 dry square cubic meters (dscm) [60 dry square cubic feet (dscf)] except that smaller sampling times or volumes may be approved by the Administrator when necessitated by process variables or other factors.

(2) Method 3 shall be used for gas analysis when applying Method 5, Method 5B, or Method 17.

(3) Method 5, Method 5B, or Method 17 shall be used to measure the concentration of PM as follows:

(i) Method 5 may be used only at affected facilities without wet scrubber systems.

(ii) Method 17 may be used at affected facilities with or without wet scrubber systems provided the stack gas temperature does not exceed a temperature of 160 EC (320 EF). The procedures of Sections 2.1 and 2.3 of Method 5B may be used in Method 17 only if Method 17 is used in conjunction with a wet scrubber system. Method 17 shall not be used in conjunction with a wet scrubber system if the effluent is saturated or laden with water droplets.

(iii) Method 5B may be used in conjunction with a wet scrubber system.

(4) For Method 5 or Method 5B, the temperature of the sample gas in the probe and filter holder shall be monitored and maintained at 160 EC (320 EF).

(5) For determination of PM emissions, an oxygen or carbon dioxide measurement shall be obtained simultaneously with each run of Method 5, Method 5B, or Method 17 by traversing the duct at the same sampling location.

(6) For each run using Method 5, Method 5B, or Method 17, the emission rates expressed in ng/J (lb/million Btu) heat input shall be determined using:

(i) The oxygen or carbon dioxide measurements and PM measurements obtained under this section,

(ii) The dry basis F-factor, and

(iii) The dry basis emission rate calculation procedure contained in Method 19 (appendix A).

(7) Method 9 (6-minute average of 24 observations) shall be used for determining the opacity of stack emissions.

(b) The owner or operator of an affected facility seeking to demonstrate compliance with the PM standards under § 60.43c(b)(2) shall demonstrate the maximum design heat input capacity of the steam generating unit by operating the steam generating unit at this capacity for 24 hours. This demonstration shall be made during the initial performance test, and a subsequent demonstration may be requested at any other time. If the demonstrated 24-hour average firing rate for the affected facility is less than the maximum design heat input capacity stated by the manufacturer of the affected facility, the demonstrated 24-hour average firing rate shall be used to determine the annual capacity factor for the affected facility; otherwise, the maximum design heat input capacity provided by the manufacturer shall be used.

§ 60.46c Emission monitoring for sulfur dioxide

(a) Except as provided in paragraphs (d) and (e) of this section, the owner or operator of an affected facility subject to the SO₂ emission limits under § 60.42c shall install, calibrate, maintain, and operate a CEMS for measuring SO₂ concentrations and either oxygen or carbon dioxide concentrations at the outlet of the SO₂ control device (or the outlet of the steam generating unit if no SO₂ control device is used), and shall record the output of the system. The owner or operator of an affected facility subject to the percent reduction requirements under § 60.42c

shall measure SO₂ concentrations and either oxygen or carbon dioxide concentrations at both the inlet and outlet of the SO₂ control device.

(b) The 1-hour average SO₂ emission rates measured by a CEM shall be expressed in ng/J or lb/million Btu heat input and shall be used to calculate the average emission rates under § 60.42c. Each 1-hour average SO₂ emission rate must be based on at least 30 minutes of operation and include at least 2 data points representing two 15-minute periods. Hourly SO₂ emission rates are not calculated if the affected facility is operated less than 30 minutes in a 1-hour period and are not counted toward determination of a steam generating unit operating day.

(c) The procedures under § 60.13 shall be followed for installation, evaluation, and operation of the CEMS.

(1) All CEMS shall be operated in accordance with the applicable procedures under Performance Specifications 1, 2, and 3 (Appendix B).

(2) Quarterly accuracy determinations and daily calibration drift tests shall be performed in accordance with Procedure 1 (Appendix F).

(3) For affected facilities subject to the percent reduction requirements under § 60.42c, the span value of the SO₂ CEMS at the inlet to the SO₂ control device shall be 125 percent of the maximum estimated hourly potential SO₂ emission rate of the fuel combusted, and the span value of the SO₂ CEMS at the outlet from the SO₂ control device shall be 50 percent of the maximum estimated hourly potential SO₂ emission rate of the fuel combusted.

(4) For affected facilities that are not subject to the percent reduction requirements of § 60.42c, the span value of the SO₂ CEMS at the outlet from the SO₂ control device (or outlet of the steam generating unit if no SO₂ control device is used) shall be 125 percent of the maximum estimated hourly potential SO₂ emission rate of the fuel combusted.

(d) As an alternative to operating a CEMS at the inlet to the SO₂ control device (or outlet of the steam generating unit if no SO₂ control device is used) as required under paragraph (a) of this section, an owner or operator may elect to determine the average SO₂ emission rate by sampling the fuel prior to combustion. As an alternative to operating a CEM at the outlet from the SO₂ control device (or outlet of the steam generating unit if no SO₂ control device is used) as required under paragraph (a) of this section, an owner or operator may elect to determine the average SO₂ emission rate by using Method 6B. Fuel sampling shall be conducted pursuant to either paragraph (d)(1) or (d)(2) of this section. Method 6B shall be conducted pursuant to paragraph (d)(3) of this section.

(1) For affected facilities combusting coal or oil, coal or oil samples shall be collected daily in an as-fired condition at the inlet to the steam generating unit and analyzed for sulfur content and heat content according the Method 19. Method 19 provides procedures for converting these measurements into the format to be used in calculating the average SO₂ input rate.

(2) As an alternative fuel sampling procedure for affected

facilities combusting oil, oil samples may be collected from the fuel tank for each steam generating unit immediately after the fuel tank is filled and before any oil is combusted. The owner or operator of the affected facility shall analyze the oil sample to determine the sulfur content of the oil. If a partially empty fuel tank is refilled, a new sample and analysis of the fuel in the tank would be required upon filling. Results of the fuel analysis taken after each new shipment of oil is received shall be used as the daily value when calculating the 30-day rolling average until the next shipment is received. If the fuel analysis shows that the sulfur content in the fuel tank is greater than 0.5 weight percent sulfur, the owner or operator shall ensure that the sulfur content of subsequent oil shipments is low enough to cause the 30-day rolling average sulfur content to be 0.5 weight percent sulfur or less.

(3) Method 6B may be used in lieu of CEMS to measure SO₂ at the inlet or outlet of the SO₂ control system. An initial stratification test is required to verify the adequacy of the Method 6B sampling location. The stratification test shall consist of three paired runs of a suitable SO₂ and carbon dioxide measurement train operated at the candidate location and a second similar train operated according to the procedures in § 3.2 and the applicable procedures in section 7 of Performance Specification 2 (Appendix B). Method 6B, Method 6A, or a combination of Methods 6 and 3 or Methods 6C and 3A are suitable measurement techniques. If Method 6B is used for the second train, sampling time and timer operation may be adjusted for the stratification test as long as an adequate sample volume is collected; however, both sampling trains are to be operated similarly. For the location to be adequate for Method 6B 24-hour tests, the mean of the absolute difference between the three paired runs must be less than 10 percent (0.10).

(e) The monitoring requirements of paragraphs (a) and (d) of this section shall not apply to affected facilities subject to § 60.42c(h) (1), (2), or (3) where the owner or operator of the affected facility seeks to demonstrate compliance with the SO₂ standards based on fuel supplier certification, as described under § 60.48c(f) (1), (2), or (3), as applicable.

(f) The owner or operator of an affected facility operating a CEMS pursuant to paragraph (a) of this section, or conducting as-fired fuel sampling pursuant to paragraph (d)(1) of this section, shall obtain emission data for at least 75 percent of the operating hours in at least 22 out of 30 successive steam generating unit operating days. If this minimum data requirement is not met with a single monitoring system, the owner or operator of the affected facility shall supplement the emission data with data collected with other monitoring systems as approved by the Administrator.

§ 60.47c Emission monitoring for particulate matter.

(a) The owner or operator of an affected facility combusting coal, residual oil, or wood that is subject to the opacity standards

under § 60.43c shall install, calibrate, maintain, and operate a CEMS for measuring the opacity of the emissions discharged to the atmosphere and record the output of the system.

(b) All CEMS for measuring opacity shall be operated in accordance with the applicable procedures under Performance Specification 1 (appendix B). The span value of the opacity CEMS shall be between 60 and 80 percent.

§ 60.48c Reporting and recordkeeping requirements.

(a) The owner or operator of each affected facility shall submit notification of the date of construction or reconstruction, anticipated startup, and actual startup, as provided by § 60.7 of this part. This notification shall include:

(1) The design heat input capacity of the affected facility and identification of fuels to be combusted in the affected facility.

(2) If applicable, a copy of any Federally enforceable requirement that limits the annual capacity factor for any fuel or mixture of fuels under § 60.42c, or § 60.43c.

(3) The annual capacity factor at which the owner or operator anticipates operating the affected facility based on all fuels fired and based on each individual fuel fired.

(4) Notification if an emerging technology will be used for controlling SO₂ emissions. The Administrator will examine the description of the control device and will determine whether the technology qualifies as an emerging technology. In making this determination, the Administrator may require the owner or operator of the affected facility to submit additional information concerning the control device. The affected facility is subject to the provisions of § 60.42c(a) or (b)(1), unless and until this determination is made by the Administrator.

(b) The owner or operator of each affected facility subject to the SO₂ emission limits of § 60.42c, or the PM or opacity limits of § 60.43c, shall submit to the Administrator the performance test data from the initial and any subsequent performance tests and, if applicable, the performance evaluation of the CEMS using the applicable performance specifications in appendix B.

(c) The owner or operator of each coal-fired, residual oil-fired, or wood-fired affected facility subject to the opacity limits under § 60.43c(c) shall submit excess emission reports for any calendar quarter for which there are excess emissions from the affected facility. If there are no excess emissions during the calendar quarter, the owner or operator shall submit a report semiannually stating that no excess emissions occurred during the semiannual reporting period. The initial quarterly report shall be postmarked by the 30th day of the third month following the completion of the initial performance test, unless no excess emissions occur during that quarter. The initial semiannual

report shall be postmarked by the 30th day of the sixth month following the completion of the initial performance test, or following the date of the previous quarterly report, as applicable. Each subsequent quarterly or semiannual report shall be postmarked by the 30th day following the end of the reporting period.

(d) The owner or operator of each affected facility subject to the SO₂ emission limits, fuel oil sulfur limits, or percent reduction requirements under § 60.42c shall submit quarterly reports to the Administrator. The initial quarterly report shall be postmarked by the 30th day of the third month following the completion of the initial performance test. Each subsequently quarterly report shall be postmarked by the 30th day following the end of the reporting period.

(e) The owner or operator of each affected facility subject to the SO₂ emission limits, fuel oil sulfur limits, or percent reduction requirements under § 60.43c shall keep records and submit quarterly reports as required under paragraph (d) of this section, including the following information, as applicable.

(1) Calendar dates covered in the reporting period.

(2) Each 30-day average SO₂ emission rate (ng/J or lb/million Btu), or 30-day average sulfur content (weight percent), calculated during the reporting period, ending with the last 30-day period in the quarter; reasons for any noncompliance with the emission standards; and a description of corrective actions taken.

(3) Each 30-day average percent of potential SO₂ emission rate calculated during the reporting period, ending with the last 30-day period in the quarter; reasons for any noncompliance with the emission standards; and a description of corrective actions taken.

(4) Identification of any steam generating unit operating days for which SO₂ or diluent (oxygen or carbon dioxide) data have not been obtained by an approved method for at least 75 percent of the operating hours; justification for not obtaining sufficient data; and a description of corrective actions taken.

(5) Identification of any times when emissions data have been excluded from the calculation of average emission rates; justification for excluding data; and a description of corrective actions taken if data have been excluded for periods other than those during which coal or oil were not combusted in the steam generating unit.

(6) Identification of the F factor used in calculations, method of determination, and type of fuel combusted.

(7) Identification of whether averages have been obtained based on CEMS rather than manual sampling methods.

(8) If a CEMS is used, identification of any times when the pollutant concentration exceeded the full span of the CEMS.

(9) If a CEMS is used, description of any modifications to the CEMS that could affect the ability of the CEMS to comply with Performance Specifications 2 or 3 (appendix B).

(10) If a CEMS is used, results of daily CEMS drift tests and quarterly accuracy assessments as required under appendix F, Procedure 1.

(11) If fuel supplier certification is used to demonstrate compliance, records of fuel supplier certification as described

under paragraph (f)(1), (2), or (3) of this section, as applicable. In addition to records of fuel supplier certifications, the quarterly report shall include a certified statement signed by the owner or operator of the affected facility that the records of fuel supplier certifications submitted represent all of the fuel combusted during the quarter.

(f) Fuel supplier certification shall include the following information:

(1) For distillate oil:

(i) The name of the oil supplier; and

(ii) A statement from the oil supplier that the oil complies with the specifications under the definition of distillate oil in § 60.41c.

(2) For residual oil:

(i) The name of the oil supplier;

(ii) The location of the oil when the sample was drawn for analysis to determine the sulfur content of the oil, specifically including whether the oil was sampled as delivered to the affected facility, or whether the sample was drawn from oil in storage at the oil supplier's or oil refiner's facility, or other location;

(iii) The sulfur content of the oil from which the shipment came (or of the shipment itself); and

(iv) The method used to determine the sulfur content of the oil.

(3) For coal:

(i) The name of the coal supplier;

(ii) The location of the coal when the sample was collected for analysis to determine the properties of the coal, specifically including whether the coal was sampled as delivered to the affected facility or whether the sample was collected from coal in storage at the mine, at a coal preparation plant, at a coal supplier's facility, or at another location. The certification shall include the name of the coal mine (and coal seam), coal storage facility, or coal preparation plant (where the sample was collected);

(iii) The results of the analysis of the coal from which the shipment came (or of the shipment itself) including the sulfur content, moisture content, ash content, and heat content; and

(iv) The methods used to determine the properties of the coal.

(g) The owner or operator of each affected facility shall record and maintain records of the amounts of each fuel combusted during each day.

(h) The owner or operator of each affected facility subject to a Federally enforceable requirement limiting the annual capacity factor for any fuel or mixture of fuels under § 60.42c or § 60.43c shall calculate the annual capacity factor individually for each fuel combusted. The annual capacity factor is determined on a 12-month rolling average basis with a new annual capacity factor calculated at the end of the calendar month.

(i) All records required under this section shall be maintained by the owner or operator of the affected facility for a period of two years following the date of such record.